

CC treatment with respect to stenosis of a coronary artery or bypass graft

XX
SQ Sequence 24 BP; 3 A; 6 C; 6 G; 9 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 24;
Best Local Similarity 82.6%; Pred. No. 3.8e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 848 ACCTGGACAAGGACCTGTAAGCAG 870
|||||
Db 23 ACCTGGACAAGAGTCTAAAGCAG 1
RESULT 160
ADCI0518
ID ADCI0518 standard; DNA; 24 BP.
XX
AC ADCI0518;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human NOVX polypeptide gene reverse primer SEQ ID NO: 537.
XX
KW ss; primer; cytostatic; antidiabetic; anorectic; cerebroprotective;
KW neuroprotective; antiinflammatory; gene therapy; antisense therapy;
KW thymomimetic; NOVX; pathology; cancer; diabetes; obesity;
KW endocrine disorder; CNS disorder; inflammatory disorder;
KW chromosome mapping; tissue typing; predictive medicine.
XX
OS Homo sapiens.
XX
PN WO2003000842-A2.
XX
PD 03-JAN-2003.
XX
PF 04-JUN-2002; 2002WO-US017443.
XX
PR 04-JUN-2001; 2001US-0295607P.
PR 04-JUN-2001; 2001US-0295661P.
PR 06-JUN-2001; 2001US-0296404P.
PR 06-JUN-2001; 2001US-0296418P.
PR 07-JUN-2001; 2001US-0296575P.
PR 11-JUN-2001; 2001US-0297414P.
PR 12-JUN-2001; 2001US-0295573P.
PR 12-JUN-2001; 2001US-0297567P.
PR 14-JUN-2001; 2001US-0298285P.
PR 15-JUN-2001; 2001US-0298528P.
PR 18-JUN-2001; 2001US-0299133P.
PR 19-JUN-2001; 2001US-0299230P.
PR 21-JUN-2001; 2001US-0299949P.
PR 22-JUN-2001; 2001US-0300177P.
PR 26-JUN-2001; 2001US-0300833P.
PR 28-JUN-2001; 2001US-0301530P.
PR 28-JUN-2001; 2001US-0301550P.
PR 03-JUL-2001; 2001US-0302351P.
PR 31-JUL-2001; 2001US-0308890P.
PR 14-SEP-2001; 2001US-0322297P.
PR 25-SEP-2001; 2001US-0324669P.
PR 03-DEC-2001; 2001US-0337477P.
PR 14-DEC-2001; 2001US-0341562P.
PR 21-FEB-2002; 2002US-0358566P.
PR 21-FEB-2002; 2002US-0359122P.
PR 22-FEB-2002; 2002US-0358978P.
PR 22-FEB-2002; 2002US-0359034P.
PR 22-FEB-2002; 2002US-0359035P.
PR 22-FEB-2002; 2002US-0359121P.
PR 27-FEB-2002; 2002US-0359964P.
PR 01-MAR-2002; 2002US-0360858P.
PR 12-MAR-2002; 2002US-0363430P.
PR 12-MAR-2002; 2002US-0363676P.
PR 10-APR-2002; 2002US-0371346P.
PR 10-MAY-2002; 2002US-0379444P.
PR 04-JUN-2002; 2002US-00379444.

XX
PA (CURA-) CURAGEN CORP.
XX
PI Agee ML, Anderson DW, Berghs C, Casman SJ, Catterton E;
PI Dipippo VA, Edinger SR, Eisen A, Ellerman K, Gangolli EA;
PI Gerlach VL, Gorman L, Guo X, Herrmann JL, Hjal T, Ji W, Kekuda R;
PI Khramtsov NV, Li L, Liu X, Malyankar UM, Miller CE, Millet I;
PI Ort T, Padigaru M, Patturajan M, Pena CBA, Rastelli L, Rieger DK;
PI Rothenberg ME, Shenoy SG, Shinkets RA, Smithson G, Spaderna SK;
PI Spytek KA, Stone DJ, Vernet CAM, Zhong H, Zhong M, Alsobrook JP;
PI Burgess CE, Lepley DM;
XX
DR WPI; 2003-210149/20.
XX
XX New isolated NOVX polypeptides and nucleic acid molecules useful for
PT treating, preventing and diagnosing pathological conditions with NOVX-
PT associated disorders, such as cancer, obesity, diabetes and inflammatory
PT or CNS diseases.
XX
PS Example B; SEQ ID NO 537; 772bp; English.
XX
CC The invention relates to novel isolated polypeptides, mature form of the
CC polypeptide, a sequence that is 95% identical to the polypeptide or the
CC polypeptide comprising one or more conservative substitutions. The NOVX
CC polypeptide is useful for treating or preventing a pathology associated
CC with the polypeptide e.g. disorders associated with aberrant expression
CC or activity of the polypeptide, such as cancer, diabetes, obesity, and
CC endocrine, CNS and inflammatory disorders. They can also be used in
CC various detection and screening assays, chromosome mapping, tissue typing
CC and predictive medicine. This sequence corresponds to a primer used to
CC amplify and isolate the coding sequence for one of the polypeptides of
CC the invention.
XX
SQ Sequence 24 BP; 10 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 24;
Best Local Similarity 82.6%; Pred. No. 3.8e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 959 GGCAGAAGGTGCTACACGAGAC 981
|||
Db 1 GGAAGAAGGTGATTCACAGAGAC 23
RESULT 161
AAD60939
ID AAD60939 standard; DNA; 24 BP.
XX
AC AAD60939;
XX
DT 15-JAN-2004 (first entry)
XX
XX BB1015 PCR primer used to isolate human SNORF7 receptor cDNA.
DE Human; SNORF7; receptor; PCR; primer; ss; inflammation;
KW autoimmune disease; neurological disorder.
XX
OS Homo sapiens.
XX
PN US2003109695-A1.
XX
PD 12-JUN-2003.
XX
PF 06-NOV-2002; 2002US-00289743.
XX
PR 22-FEB-1999; 99US-00253999.
PR 17-AUG-1999; 99US-00375926.
PR 31-JUL-2000; 2000US-00629609.
XX
XX (BORO/) BOROWSKI B E.
PA (KYAW/) KYAW H.
PA (BONI/) BONINI J A.
XX

PT immunodeficiency virus e.g. HIV-1, or immunodeficiency virus-based
 PT retroviral vector integrated into its genome, useful for identifying
 XX latent HIV activators.
 PS Example 1; Page 32; 7lpp; English.
 XX
 CC The present sequence is that of primer EV976, which was used with primer
 CC EV1333 (see AC05114) in the PCR amplification of a 171 bp fragment
 CC corresponding to the 3' end of the long terminal repeats (LTR) of
 CC retroviral vector pEV731. The amplified fragment was used as a probe for
 CC genomic DNA extracted from Jurkat cells infected with viral particles
 CC containing the HIV-derived vector LTR-Tat-IRES-GFP. The invention
 CC provides isolated cells that harbour a latent immunodeficiency virus that
 CC is transcription competent, that can be reactivated, and that is an in
 CC vitro model for latent HIV infection in vivo. The cells are useful for
 CC investigating the nature of latency, and also in drug screening assays to
 CC identify agents that activate latent HIV. Such agents are useful for
 CC reducing the reservoir of latent HIV
 XX
 SQ Sequence 23 BP; 8 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 1.0%; Score 16.6; DB 1; Length 23;
 Best Local Similarity 82.6%; Pred. No. 3.6e+02;
 Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 Qy 1051 GCCAAGTCAATCCCAACAAAGAC 1073
 |||||
 Db 1 GCTAATTCACCTCCCAACGAAGAC 23
 |||||
 RESULT 158
 AAA07024
 ID AAA07024 standard; DNA; 24 BP.
 XX
 AC AAA07024;
 XX
 DT 03-JUL-2000 (first entry)
 XX
 DE KSR PCR primer, SEQ ID NO:21.
 XX
 KW KSR; kinase suppressor of ras; CAP kinase; phosphorylation;
 KW ceramide-activated protein kinase; lipopolysaccharide; LPS; endotoxin;
 KW sphingomyelin signal transduction pathway; mutagenic; PCR primer; ss.
 XX
 OS Mus sp.
 XX
 XX US6040149-A.
 XX
 XX 21-MAR-2000.
 XX
 XX 10-JAN-1997; 97US-00785247.
 XX
 XX 11-JAN-1996; 96US-0009900P.
 XX
 PA (SLOK) SLOAN KETTERING INST CANCER RES.
 XX
 XX Zhang Y, Liu J, Kolesnick RN;
 XX WPI; 2000-270133/23.
 XX
 XX Novel method of identifying agents capable of inhibiting
 PT lipopolysaccharide induced threonine phosphorylation by a ceramide-
 PT activated protein kinase.
 XX
 PS Example VII; Col 57; 84pp; English.
 XX
 CC The invention relates to a novel method of determining whether an agent
 CC is capable of specifically inhibiting the ability of a ceramide-activated
 CC protein (CAP) kinase to phosphorylate the threonine residue in a
 CC polypeptide containing a Thr-Pro- or Thr-Leu-Pro motif. In particular,
 CC the peptide substrate that is specifically phosphorylated is Raf-1,
 CC epidermal growth factor receptor (EGFR), or suitable fragments thereof.
 CC The CAP kinase is membrane bound and has an apparent molecular weight of

CC 100-110 kD. It is an upstream participant in a sphingomyelin signal
 CC transduction pathway which uses ceramide as a second messenger. This
 CC pathway is initiated by tumour necrosis factor-alpha (TNF-alpha) and
 CC interleukin-beta (IL-beta), causing the hydrolysis of sphingomyelin to
 CC ceramide. The ceramide in turn stimulates the kinase to phosphorylate
 CC protein substrates which can then mediate signal transduction. The CAP
 CC kinase is also stimulated by the bacterial endotoxin lipopolysaccharide
 CC (LPS), which is thought to mimic the second messenger function of
 CC ceramide. The methods are useful for identifying agents that inhibit
 CC lipopolysaccharide-induced Thr phosphorylation by CAP kinase. The agents
 CC identified using the method are useful for treating disorders associated
 CC with aberrant phosphorylation of target molecules by CAP kinase, e.g.,
 CC inflammatory disorders (such as rheumatoid arthritis), ulcerative
 CC colitis, graft versus host disease, lupus erythematosus, HIV infection,
 CC disorders associated with poor stem cell growth, and septic shock.
 CC Sequences AAA07021-A07026 represent primers used in an exemplification of
 CC the present invention to generate mutant Flag peptide/murine KSR (kinase
 CC suppressor of ras) sequences via overlap extension PCR. KSR is a homologue
 CC of CAP kinase
 XX

SQ Sequence 24 BP; 6 A; 8 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 1.0%; Score 16.6; DB 1; Length 24;
 Best Local Similarity 82.6%; Pred. No. 3.8e+02;
 Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1619 CAGACCGAGGCCCGCAGCAGCGAG 1641
 |||||
 Db 2 CAGATCAAGGCTCAGCAGGCTG 24
 |||||

RESULT 159

AAF64165/c
 ID AAF64165 standard; DNA; 24 BP.

XX AAF64165;
 AC AAF64165;

DT 06-APR-2001 (first entry)
 XX

DE Primer #105.
 XX

KW Human; lipoprotein lipase; LPL; stenosis; ss.
 KW

OS Homo sapiens.
 OS

XX WO200102606-A2.
 XX

XX 11-JAN-2001.
 PD

XX 30-JUN-2000; 2000WO-US018308.
 XX

XX 02-JUL-1999; 99US-00347114.
 XX

XX (CEDA-) CEDARS SINAI MEDICAL CENT.
 XX

PI Taylor KD, Scheuner M, Rotter J, Yang H;
 PI

XX WPI; 2001-138155/14.
 DR

XX Genetic testing for determining non-responsiveness to statin drug in
 PT patients of a coronary artery disease, involves analyzing amplification
 PT products for homozygosity for a variant allele in the human lipoprotein
 PT lipase gene.
 XX

XX Example 5; Page 26; 74pp; English.
 XX

CC The present invention relates to detecting a genetic predisposition in a
 CC human subject for non-responsiveness to statin drug treatment, involving
 CC amplifying nucleic acids including a non-coding or untranslated region
 CC within the 3' end of the human lipoprotein lipase (LPL) gene from a
 CC tissue sample. The method is useful for determining which patients
 CC suffering from coronary artery disease, or which coronary artery bypass
 CC graft (CABG) patients, will likely not respond positively to statin drug

DE Human hGT1 PCR primer 1.
 XX Polymorphic CAG repeat; hGT1; diagnosis; prognosis; schizophrenia; human;
 KW transcription factor; neuroleptic activity; affective disorder;
 KW manic depression; neurodevelopmental brain disease; detection;
 KW phenotypic variability; PCR primer; ss.
 XX Synthetic.
 OS Homo sapiens.
 PN WO9915639-A1.
 XX 01-APR-1999.
 PD 18-SEP-1998; 98WO-CA000884.
 PF 19-SEP-1997; 97CA-02216057.
 XX (UYMC-) UNIV MCGILL.
 XX Rouleau GA, Joobor R, Benkelfat C;
 PI WPI; 1999-254703/21.
 XX A human GT1 gene containing a transcribed polymorphic CAG repeat, useful
 PT in the diagnosis and treatment of schizophrenia.
 PT Disclosure; Page 16; 4lpp; English.
 PS This invention describes novel human GT1 (hGT1) transcription factor gene
 XX with neuroleptic activity containing a transcribed polymorphic CAG
 CC repeat. Allelic variants of the hGT1 gene CAG repeat are associated with
 CC schizophrenia, affective disorders (especially manic depression), with
 CC neurodevelopmental brain diseases or with phenotypic variability, with
 CC respect to long term response to neuroleptic medication. Short (171-177
 CC bp) allelic variants of CAG repeats in the hGT1 gene, are indicative of
 CC non-severe schizophrenia and neuroleptic response in patients. Probes
 CC and/or primers designed using the hGT1 gene can be used to identify genes
 CC interacting with a biochemical pathway affected by the hGT1 gene. The
 CC identified gene role can then be evaluated in psychiatric patients.
 CC Therapeutic agents can be identified by administering the agent to a
 CC transgenic mammal (or schizophrenic patients) and evaluating the
 CC prevention and/or treatment of development of schizophrenia
 XX Sequence 23 BP; 4 A; 6 C; 9 G; 4 T; 0 U; 0 Other;
 SQ Query Match 1.0%; Score 16.6; DB 1; Length 23;
 Best Local Similarity 82.6%; Pred. No. 3.6e+02;
 Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 OY 1470 GGGGGAGCGGATCCCAAACTTC 1492
 DB 1 GGGGCAGCGGTCCAGATCTTC 23
 RESULT 156
 AAA98718
 ID AAA98718 standard; DNA; 23 BP.
 XX AC AAA98718;
 XX 08-FEB-2001 (first entry)
 DT L. mexicana kinase PCR primer invPCR2.
 DE MAP-kinase-kinase; LMWK; diagnosis; treatment; leishmaniasis; disease;
 KW parasite; protozoal infection; vaccine; PCR primer; ss.
 KW Leishmania mexicana.
 OS DE19939070-A1.
 XX 28-SEP-2000.
 PD

XX 18-AUG-1999; 99DE-01039070.
 PF 26-MAR-1999; 99DE-01013905.
 PR (PLAC) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
 PA Wiese M;
 XX WPI; 2000-619872/60.
 DR Use of nucleic acid encoding Leishmania kinases for identifying and
 XX preparing diagnostic, preventative and therapeutic agents.
 PT Example 1.7; Page 69; 98pp; German.
 PS This invention describes a novel use of nucleic acid (I) that encodes
 XX Leishmania kinases (II) for identification and preparation of agents for
 CC diagnosis, treatment and/or prevention of leishmaniasis. The invention
 CC also describes (a) use of (II) for identifying and producing agents for
 CC diagnosis, treatment and/or prevention of leishmaniasis; (b) antibodies
 CC (Ab) directed against (II); and (c) Leishmania mutants in which at least
 CC one gene (I) is inactivated. (II) are essential for differentiation and
 CC replication of the parasites, so are targets for development of specific
 CC inhibitors. Mutants defective in (II) induce an immune response but do
 CC not cause disease. (I) and (II) are useful for identifying and preparing
 CC agents for diagnosis, treatment and/or prevention of protozoal
 CC infections, particularly leishmaniasis. (I), (II) and (II)-specific
 CC antibodies may themselves be used for diagnosis and treatment. Leishmania
 CC mutants that are unable to express at least one (II) are useful as live
 CC vaccines
 XX Sequence 23 BP; 7 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
 SQ Query Match 1.0%; Score 16.6; DB 1; Length 23;
 Best Local Similarity 82.6%; Pred. No. 3.6e+02;
 Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 OY 994 AACCTGCTCATCAACGAGAGGGG 1016
 DB 1 AACCTGCTCATCAGCGAACTGG 23
 RESULT 157
 ACF05113
 ID ACF05113 standard; DNA; 23 BP.
 XX AC ACF05113;
 XX 06-NOV-2003 (first entry)
 DT Retroviral vector pEV731 PCR primer EV976.
 DE Vector; pEV731; immunodeficiency virus; HIV; anti-HIV; latency; PCR;
 XX primer; ss.
 KW Retrovirus.
 OS WO2003054160-A2.
 PN 03-JUL-2003.
 PD 18-DEC-2002; 2002WO-US040698.
 PF 19-DEC-2001; 2001US-0341727P.
 XX (REGC) UNIV CALIFORNIA.
 PA Verdin E, Jordan A;
 PI WPI; 2003-577369/54.
 XX Novel isolated cells that comprise transcription competent
 PT

CC useful for organ transplantation studies, for the study of autoimmune
 CC disease and for the determination of susceptibility to infectious disease
 XX
 SQ Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.8; DB 1; Length 21;
 Best Local Similarity 90.0%; Pred. No. 3.1e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 352 GGGTCTGATGGGAGAGTGA 371
 |||||
 Db 21 GGGTCTGATGGGAGAGTCA 2

RESULT 153
 AAA90559/c
 ID AAA90559 standard; DNA; 21 BP.

XX AAA90559;

AC 11-JAN-2001 (first entry)

XX HLA class I gene sequencing primer #9.

XX Human Leukocyte Antigen class I; HLA-A; antigen presentation; HLA typing;
 KW organ transplantation; autoimmune disease; sequencing primer;
 KW infectious disease susceptibility; chromosome 6p21.3; ss.

XX Homo sapiens.

XX US6103465-A.

XX 15-AUG-2000.

XX 03-OCT-1995; 95US-00538666.

XX 14-FEB-1995; 95US-00390251.

XX (PEKE) PERKIN-ELMER CORP.

XX Parham P, Johnston-Dow L, Chadwick RB;

DR WPI; 2000-542544/49.

XX Typing HLA class I genes for organ transplantation, involves contacting
 PT the sample DNA containing HLA class I gene comprising two exons and a
 PT target sequence, with amplification primers and detecting the amplicon.

PS Claim 10; Col 35; 60pp; English.

XX The present sequence is a sequencing primer for Human Leukocyte Antigen
 CC (HLA) class I gene. The HLA class I genes are found on chromosome 6p21.3.
 CC HLA class I proteins are found on the surface of almost all nucleated
 CC cells and are involved in antigen presentation to immune system cells.
 CC This primer can be used to type HLA class I genes: by carrying out PCR on
 CC a sample DNA, comprising HLA class I gene, and detecting the amplicon
 CC formed using a sequence-specific detection method e.g. DNA sequencing
 CC (using the present sequence). The present sequence is useful for
 CC discriminating among the HLA-A, HLA-B, and HLA-C genes and other related
 CC class I genes and pseudogenes. In addition, the present sequence is
 CC useful for organ transplantation studies, for the study of autoimmune
 CC disease and for the determination of susceptibility to infectious disease

XX Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.8; DB 1; Length 21;
 Best Local Similarity 90.0%; Pred. No. 3.1e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 352 GGGTCTGATGGGAGAGTGA 371
 |||||
 Db 21 GGGTCTGATGGGAGAGTCA 2

RESULT 154
 AAQ62402
 ID AAQ62402 standard; DNA; 23 BP.

XX AAQ62402;

DT 25-MAR-2003 (revised)

DT 18-NOV-1994 (first entry)

XX Vector pVAC1 construction primer #8.

KW Vector; pVAC1; pRC/RSV; leader sequence; termination signal; PCR;
 KW fusion protein; pSfi/Not.Tag1; pelB leader; human; immunoglobulin; VH1;
 KW single chain; Fv; murine antibody; retroviral; envelope; amplify;
 KW plasmid; vaccine; polymerase chain reaction; ss.

XX Synthetic.

XX WO9408008-A1.

XX 14-APR-1994.

XX 04-OCT-1993; 93WO-GB002054.

XX 02-OCT-1992; 92GB-00020808.

XX (MEDI-) MEDICAL RES COUNCIL.

XX Hawkins RE, Russell SJ, Stevenson FK, Winter GP;

XX WPI; 1994-135575/16.

XX Modulating immune response to a disease marker - by administering a
 PT vector which expresses the disease marker to interact with the immune
 PT system.

PS Disclosure; Page 33; 77pp; English.

XX The sequences given in AAQ62395-449 are primers which were used in the
 CC construction of the vector pVAC1. This vector is based on the
 CC commercially available vector pRC/RSV. Leader sequences and termination
 CC signals were introduced into the vector to allow for production of fusion
 CC proteins. The vector, pSfi/Not.Tag1, was modified to replace the pelB
 CC leader with the human immunoglobulin VH1 leader sequence that permits the
 CC encoding of an sfII cloning site without modification of the amino acid
 CC sequence. This fragment was then cloned as an EcoRI/Blunt-HindIII
 CC fragment into NotI/Blunt- HindIII cut vector pRC/RSV to give pVAC1. The
 CC single chain Fv for an individual patient can be inserted within the VH1
 CC leader sequence. This plasmid when encoding a single chain murine
 CC antibody/retroviral envelope fusion protein can be used as a plasmid
 CC vaccine and it induces a strong humoral response to the antibody moiety
 CC in BALB/c mice. (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 23 BP; 5 A; 4 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 23;
 Best Local Similarity 82.6%; Pred. No. 3.6e+02;
 Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1269 TGAGGAGACGTGGCCAGGATCC 1291
 |||||
 Db 1 TGAGGAGAGGTGACCGAGGTCC 23

RESULT 155
 AAX23985
 ID AAX23985 standard; DNA; 23 BP.

XX AAX23985;

XX 25-JUN-1999 (first entry)

XX

XX PF 20-FEB-1996; 96WO-US002408.
 XX PR 20-FEB-1996; 96WO-US002408.
 XX PA (PEKE) PERKIN-ELMER CORP.
 XX PI Johnston-Dow L, Chadwick RB, Parham P;
 XX DR WPI; 1997-435175/40.
 XX PT Amplification and sequencing primers specific for HLA class I genes -
 XX PT useful for locus specific nucleic acid amplification for HLA typing.
 XX PS Claim 10; Page 57; 105pp; English.
 XX SQ Sequencing primers AAT94987-92 were used to sequence PCR amplified human
 CC leukocyte antigen (HLA) class I genes. The primers are designed to
 CC hybridise to exon-intron borders of exons 2, 3 and 4 of the HLA genes.
 CC PCR primers were used for locus specific nucleic acid amplification for
 CC HLA typing. Typing HLA-A, -B or -C class I genes comprises providing a
 CC sample DNA containing a HLA-A, -B or -C class I gene comprising providing a
 CC exon and a target sequence, contacting the sample DNA with an
 CC amplification primer including sequence complementary to sequence located
 CC in exon 1 of the HLA-A, -B or -C gene, and a second amplification primer
 CC sequence complementary to sequence located in exon 5 of the HLA-A, -B or
 CC -C gene. The PCR product is sequenced using the above primers and the
 CC determined DNA sequence compared with the DNA sequences of known HLA
 CC types
 XX SQ Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 1.0%; Score 16.8; DB 1; Length 21;
 Best Local Similarity 90.0%; Pred. No. 3.1e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 352 GGGTCTGATGGGAGAGTGA 371
 Db |||||
 21 GGGTCTGATGGGAGAGTCA 2
 RESULT 151
 AAT95004/c
 ID AAT95004 standard; DNA; 21 BP.
 XX AC AAT95004;
 XX DT 02-APR-1998 (first entry)
 XX DE Primer for sequencing exon 4 antisense strand of HLA class I genes.
 XX KW Human leukocyte antigen-C class I gene; HLA-C; exon 1; exon 5;
 XX KW locus specific nucleic acid amplification; HLA typing; exon 4; ss.
 XX OS Synthetic.
 XX OS Homo sapiens.
 XX PN WO9731126-A1.
 XX PD 28-AUG-1997.
 XX PF 20-FEB-1996; 96WO-US002408.
 XX PR 20-FEB-1996; 96WO-US002408.
 XX PA (PEKE) PERKIN-ELMER CORP.
 XX PI Johnston-Dow L, Chadwick RB, Parham P;
 XX DR WPI; 1997-435175/40.
 XX PT Amplification and sequencing primers specific for HLA class I genes -
 XX PT useful for locus specific nucleic acid amplification for HLA typing.

XX Claim 29; Page 62; 105pp; English.
 XX PS The present sequencing primer was used to sequence PCR amplified human
 CC leukocyte antigen (HLA) class I genes. The primer is designed to sequence
 CC the antisense strand of exon 4, from the 5' exon-intron border. PCR
 CC primers were used for locus specific nucleic acid amplification for HLA
 CC typing. Typing HLA-A, -B or -C class I genes comprises providing a sample
 CC DNA containing a HLA-A, -B or -C class I gene having a 1st and 2nd exon
 CC and a target sequence, contacting the sample DNA with an amplification
 CC primer including sequence complementary to sequence located in exon 1 of
 CC the HLA-A, -B or -C gene, and a second amplification primer sequence
 CC complementary to sequence located in exon 5 of the HLA-A, -B or -C gene.
 CC The PCR product is sequenced using the above primers and the determined
 CC DNA sequence compared with the DNA sequences of known HLA types
 XX SQ Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 1.0%; Score 16.8; DB 1; Length 21;
 Best Local Similarity 90.0%; Pred. No. 3.1e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 352 GGGTCTGATGGGAGAGTGA 371
 Db |||||
 21 GGGTCTGATGGGAGAGTCA 2
 RESULT 152
 AAA90553/c
 ID AAA90553 standard; DNA; 21 BP.
 XX AC AAA90553;
 XX DT 11-JAN-2001 (first entry)
 XX DE HLA class I gene sequencing primer #3.
 XX KW Human Leukocyte Antigen class I; HLA-A; antigen presentation; HLA typing;
 KW organ transplantation; autoimmune disease; sequencing primer;
 KW infectious disease susceptibility; chromosome 6p21.3; ss.
 XX OS Homo sapiens.
 XX PN US6103465-A.
 XX PD 15-AUG-2000.
 XX PF 03-OCT-1995; 95US-00538666.
 XX PR 14-FEB-1995; 95US-00390251.
 XX PA (PEKE) PERKIN-ELMER CORP.
 XX PI Parham P, Johnston-Dow L, Chadwick RB;
 XX DR WPI; 2000-542544/49.
 XX PT Typing HLA class I genes for organ transplantation, involves contacting
 PT the sample DNA containing HLA class I gene comprising two exons and a
 PT target sequence, with amplification primers and detecting the amplicon.
 XX PS Claim 39; Col 38; 60pp; English.
 XX CC The present sequence is a sequencing primer for Human Leukocyte Antigen
 CC (HLA) class I gene. The HLA class I genes are found on chromosome 6p21.3.
 CC HLA class I proteins are found on the surface of almost all nucleated
 CC cells and are involved in antigen presentation to immune system cells.
 CC This primer can be used to type HLA class I genes: by carrying out PCR on
 CC a sample DNA, comprising HLA class I gene, and detecting the amplicon
 CC formed using a sequence-specific detection method e.g. DNA sequencing
 CC (using the present sequence). The present sequence is useful for
 CC discriminating among the HLA-A, HLA-B, and HLA-C genes and other related
 CC class I genes and pseudogenes. In addition, the present sequence is

```
FT      /*tag= c  
FT      /mod_base= OTHER  
FT      /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"  
XX  
XX  
PN     US2003125275-A1.  
XX  
XX  
PD     03-JUL-2003.  
XX  
XX  
PF     04-DEC-2001; 2001US-00007010.  
XX  
XX  
PR     04-DEC-2001; 2001US-00007010.  
XX  
XX  
PA     (ISIS-) ISIS PHARM INC.  
XX  
XX  
PI     Borchers AH, Dobie KW;  
XX  
XX  
WPI; 2003-811000//76.  
XX  
XX  
PT     New antisense oligonucleotides targeted to nucleic acids encoding  
PT     hematopoietic cell protein tyrosine kinase, useful for diagnosing or  
PT     treating cancer (e.g. leukemia), inflammation, diabetes or viral  
PT     infections.  
XX  
XX  
PS     Example 15; Page 26; 59pp; English.  
XX  
XX  
CC     The invention relates to a compound targetted to a nucleic acid molecule  
CC     encoding haematopoietic cell protein tyrosine kinase. The compound  
CC     inhibits the expression of haematopoietic cell protein tyrosine kinase  
CC     and it specifically hybridises with the nucleic acid molecule encoding  
CC     the tyrosine kinase or with at least an 8-nucleobase portion of an active  
CC     site on the nucleic acid molecule encoding the tyrosine kinase. The  
CC     antisense compounds are useful for modulating the expression of  
CC     haematopoietic cell protein tyrosine kinase and treating diseases or  
CC     conditions associated with the expression of the tyrosine kinases, such as  
CC     hyperproliferative disorders (e.g. cancer), inflammation, diabetes or a  
CC     viral infection. The antisense compounds are also useful for diagnostics,  
CC     therapeutics, prophylaxis, e.g. to prevent or delay infection,  
CC     inflammation or tumour formation, as research reagents and kits and in  
CC     distinguishing between functions of various members of a biological  
CC     pathway. The present sequence is human haematopoietic cell tyrosine  
CC     kinase antisense oligonucleotide  
XX  
SQ     Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;  
  
Query Match          1.0%; Score 16.8; DB 1; Length 20;  
Best Local Similarity   90.0%; Pred No. 2.9e+02;  
Matches 18; Conservative    0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy       1034 ACTTTGGCCTGCGCCGAGCC 1053  
            ||||| |  
Db        20 ACTTTGGCCTGCGCCGATC 1  
  
RESULT 149  
ADP74230/c  
ID       ADP74230 standard; DNA; 20 BP.  
XX  
XX  
AC       ADP74230;  
XX  
DT       26-AUG-2004 (first entry)  
XX  
DE  
DE  
KW       Human CDK9 antisense oligonucleotide seqid 15.  
KW       cytosstatic; gene therapy; CDK9; cyclin dependent kinase 9;  
KW       CDK9 associated disorder; hyperproliferative disorder; cancer; human;  
KW       antisense oligonucleotide; antisense technology; ss.  
XX  
OS       Homo sapiens.  
XX  
FH       Key Location/Qualifiers  
FT modified_base 1..20  
FT                                     /*tag= b  
FT                                     /mod_base= OTHER
```

PS Disclosure; Page 5; 1lpp; English.

XX The sequence represents a human mammary gland enriched chemokine (MEC) sense primer. The primer was used in the invention to generate a fragment encompassing the entire coding region of MEC. The invention relates to a novel method for regulating a tumour or adverse bodily reaction, comprising providing a therapeutic composition having a mammary gland chemokine polypeptide. The polypeptide of the invention has cytostatic and antiinflammatory activity. The method of the invention is useful for regulating a tumour or adverse bodily reaction. The invention also provides a method useful for detecting a tumour using a probe comprising the polynucleotide or an antibody to the MEC. The adverse bodily reactions include cancer and inflammation

XX Sequence 26 BP; 4 A; 6 C; 10 G; 6 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 26;
Best Local Similarity 80.0%; Pred. No. 3.4e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 941 GCCTGGCTACTGCCACCGCAGAA 965

Db 26 GCCTGGCTACTGGCACTGACAGCA 2

RESULT 147

ID ABS64424

XX ABS64424 standard; DNA; 26 BP.

AC ABS64424;

XX 15-NOV-2002 (first entry)

DT 15-NOV-2002 (first entry)

XX Human NOVX probe Ag2492.

DE Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety;

XX Parkinson's disease; Huntington's disease; neurological disorder;

KW schizophrenia; manic depression; mental retardation; angina pectoris;

KW cardiovascular disease; acute heart failure; myocardial infarction;

KW muscular disease; muscular disorder; retinal disease; photoreception;

KW deafness; keratinisation disorder; cancer; ovarian cancer; melanoma;

KW immunological disorder; inflammatory disease; immune disease; diabetes;

KW bacterial infection; fungal infection; protozoal infection; obesity;

KW viral infection; reproductive system disorder; metabolic disturbance;

KW anorexia; wasting disorder; chronic disease; infectious disease;

KW dyslipidaemia; probe; ss.

XX Homo sapiens.

OS WO200264791-A2.

PN 22-AUG-2002.

XX 10-DEC-2001; 2001WO-US048369.

XX 08-DEC-2000; 2000US-0254329P.

PR 14-DEC-2000; 2000US-0255648P.

PR 15-MAY-2001; 2001US-0291037P.

PR 08-JUN-2001; 2001US-0297173P.

PR 08-JUN-2001; 2001US-0309258P.

PR 29-AUG-2001; 2001US-0315639P.

PR 01-OCT-2001; 2001US-0326393P.

XX (CURA-) CURAGEN CORP.

PA Alsbrook JP, Anderson DW, Burgess CE, Boldog FL, Casman SJ;

XX Colman SD, Edinger SR, Ellerman K, Gerlach V, Gorman L, Grosse WM;

PI Guo X, Herrmann JR, Kekuda R, Lepley DW, Li L, Macdougall JR;

PI Millet I, Pena CEA, Peyman JA, Rastelli L, Rieger DK, Shinkets RA;

PI Smithson G, Spytke KA, Stone DJ, Tchernev VT, Vernet CAM, Voss EZ;

PI Zerhusen BD, Zhong H, Zhong M;

XX WPI; 2002-643486/69.

DR

XX New NOVX polypeptides and polynucleotides useful for treating or preventing e.g. neurodegenerative diseases, neurological disorders, cardiovascular diseases, muscular diseases and disorders, or immunological diseases.

XX Example 2; Page 247; 299pp; English.

XX The present invention relates to new NOVX polypeptides. The polypeptides, polynucleotides and antibodies are useful in the manufacture of a medicament for treating or preventing neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease, or Huntington's disease), neurological disorders (e.g. anxiety, schizophrenia, manic depression or mental retardation), cardiovascular disease (e.g. acute heart failure, angina pectoris or myocardial infarction), muscular diseases and disorders, retinal diseases (including those involving photoreception, deafness and keratinisation disorders), cancer (e.g. ovarian cancer or melanoma), immunological disorders, inflammatory and immune diseases, bacterial, fungal, protozoal and viral infections, and reproductive system disorders. The proteins of the invention may be used to screen drugs or compounds that modulate the NOVX protein activity or expression, as well as to treat disorders characterised by insufficient or excessive production of NOVX protein or protein forms that have decreased or aberrant activity compared to NOVX wild type protein, such as diabetes, obesity, metabolic disturbances associated with obesity, anorexia and wasting disorders associated with chronic diseases and various cancers, infectious diseases and various dyslipidaemias. The nucleic acid sequences of the invention may be used in chromosome mapping, identifying an individual from minute biological samples (tissue typing), and in forensic identification of a biological sample. The present nucleic acid sequence represents a probe that was used in the methods of the invention for detection of NOVX genes

XX Sequence 26 BP; 10 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 26;
Best Local Similarity 80.0%; Pred. No. 3.4e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 767 TCAGGAGCTCAACACCGCCACAT 791

Db 2 TCAGGAGCTCAACACCGCCACAT 26

RESULT 148

AAD62208/c

ID AAD62208 standard; DNA; 20 BP.

XX AAD62208;

XX 15-JAN-2004 (first entry)

DT 15-JAN-2004 (first entry)

XX Human haematopoietic cell tyrosine kinase antisense oligo ISIS #150763.

DE Haematopoietic cell; tyrosine kinase; hyperproliferative disorder;

XX cancer; therapy; inflammation; diabetes; viral infection; inflammation;

KW tumour; cytostatic; virucide; antisense therapy; antisense; human;

KW phosphorothioate backbone; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "phosphorothioate backbone; All cytidines are 5-

FT methyl cytidines"

FT modified_base 1..5

FT /tag= b

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"

FT modified_base 16..20

FT


```
Db 1 CTGTTCCGCTGCCCTCGGGCTGC 25
||||| ||||| || || |||
RESULT 140
ADB03816
ID ADB03816 standard; DNA; 25 BP.
XX
AC ADB03816;
XX
XX 20-NOV-2003 (first entry)
XX
DE Human MDZ7 scanning oligonucleotide SEQ ID 4802.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EPI281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS Example 8; SEQ ID NO 4802; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 25 BP; 0 A; 11 C; 8 G; 6 T; 0 U; 0 Other;
Query Match 1.0%; Score 17; DB 1; Length 25;
Best Local Similarity 80.0%; Pred. No. 3.3e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
Qy 923 TGTTCAGCTGCTCGGCTGC 947
||||| ||||| || || |||
Db 1 TGTTCGCTGCCCTCGGGCTGC 25
||||| ||||| || || |||
RESULT 141
ADB03814
ID ADB03814 standard; DNA; 25 BP.
XX
XX EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
AC ADB03814;
XX
XX 20-NOV-2003 (first entry)
XX
DE Human MDZ7 scanning oligonucleotide SEQ ID 4800.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EPI281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS Example 8; SEQ ID NO 4800; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 25 BP; 0 A; 12 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 1.0%; Score 17; DB 1; Length 25;
Best Local Similarity 80.0%; Pred. No. 3.3e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
Qy 921 CCTGTTCCAGCTGCTCGGCTGC 945
||||| ||||| || || |||
Db 1 CCTGTTCCGCTGCCCTCGGGCTGC 25
||||| ||||| || || |||
RESULT 142
ACI48161/c
ID ACI48161 standard; DNA; 25 BP.
XX
AC ACI48161;
XX
XX 13-OCT-2003 (first entry)
XX
DE Human microarray DNA oligonucleotide SEQ ID NO 48152.
XX
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
```


CC conjunctival scarring) or a hyperproliferative disease or condition (e.g. cancer), or in inhibiting the growth of a tumour. This sequence represents a human JNK2 oligonucleotide of the invention.

XX SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1033 GACTTTGGCTGGCCCG 1049
Db 1 GACTTTGGCTGGCCCG 17

RESULT 138
AAZ36748/C
ID AAZ36748 standard; DNA; 25 BP.
XX AC AAZ36748;
XX DT 13-MAR-2000 (first entry)
DE PCR primer used to amplify GenBank accession number H27389.
XX KW Stimulus-regulated nucleic acid; sequence profile; nucleic acid level;
KW differentially expressed nucleic acid; disease state; cancer;
KW autoimmune disease; infectious disease; aging; developmental disorder;
KW proliferative disorder; neurological disorder; toxicity; PCR primer;
KW treatment resistance; differential expression; drug discovery;
KW growth factor; epidermal growth factor; radiation; stress; pathogen; ss.
XX OS Synthetic.
OS Homo sapiens.
XX PN WO9955913-A2.
XX PD 04-NOV-1999.
XX PF 27-APR-1999; 99WO-US009119.
XX PR 27-APR-1998; 98US-0083331P.
PR 27-AUG-1998; 98US-0098070P.
PR 04-FEB-1999; 99US-0118624P.
XX (KIMM-) KIMMEL CANCER CENT SIDNEY.
XX McClelland M, Welsh J, Trenkle T;
XX WPI; 2000-086388/07.
XX Measuring expression of low abundance reduced complexity target nucleic acid molecules.
XX Example 3; Page 96; 187pp; English.

CC PCR primers 236748-49 were used to amplify GenBank accession number
CC H27389, for confirmation of differential analysis. The amplified sequence
CC represents a target for the method of the invention. The specification
CC describes a method for measuring the level of two or more nucleic acid
CC molecules in a target. The method comprises contacting a probe with an
CC arbitrarily or statistically sampled target and detecting the amount of
CC specific binding of the target to the probe. The methods can be used to
CC identify differentially expressed nucleic acid molecules associated with
CC disease states, such as cancer, autoimmune disease, infectious disease,
CC aging, developmental disorder, proliferative disorder or neurological
CC disorder. Alternatively the methods can be used to assess the efficacy or
CC toxicity of or a resistance to a treatment. Also the methods can be used
CC to determine differential expression of nucleic acid molecules in
CC response to a stimulus, e.g. a chemical, drug or growth factor
CC (especially epidermal growth factor), radiation, stress or a pathogen.
CC The methods can also be used to determine co-regulated genes that can be
CC potential targets for drug discovery

XX SQ Sequence 25 BP; 5 A; 4 C; 7 G; 9 T; 0 U; 0 Other;
Query Match 1.0%; Score 17; DB 1; Length 25;
Best Local Similarity 80.0%; Pred. No. 3.3e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 531 CAATAGCCCCCATCTTTGACAAGCCC 555
Db 25 CACTAGCAGCATCTTTGAAAAGCAC 1

RESULT 139
ADB03815
ID ADB03815 standard; DNA; 25 BP.
XX AC ADB03815;
XX DT 20-NOV-2003 (first entry)
DE Human MDZ7 scanning oligonucleotide SEQ ID 4801.
XX KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX OS Homo sapiens.
XX PN EP1281758-A2.
XX PD 05-FEB-2003.
XX PF 30-JUL-2002; 2002EP-00016874.
XX PR 02-AUG-2001; 2001US-00922181.
XX (AEOM-) AEOMICA INC.
XX Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX Example 8; SEQ ID NO 4801; 103pp; English.
XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
XX encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
XX MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
XX 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.

XX SQ Sequence 25 BP; 0 A; 11 C; 8 G; 6 T; 0 U; 0 Other;
Query Match 1.0%; Score 17; DB 1; Length 25;
Best Local Similarity 80.0%; Pred. No. 3.3e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 922 CTGTTCCAGCTGCTCCGTGGCTGG 946

XX 01-JUL-2004 (first entry)
 XX Human Jun N-terminal kinase 2 (JNK2) oligonucleotide #3.
 XX
 XX Human; Jun N-terminal kinase; JNK; Jun N-terminal kinase 2; JNK2;
 KW hyperproliferative disease; cell cycle progression;
 KW protein phosphorylation; tumour growth; cancer; apoptosis;
 KW prostate cancer; inflammation; fibrosis; fibrotic disease; scarring;
 KW peritoneal adhesion; lung fibrosis; conjunctival scarring; cytostatic;
 KW antiinflammatory; vulnery; ss.
 XX
 OS Homo sapiens.
 XX
 XX US2004029823-A1.
 XX
 XX 12-FEB-2004.
 XX
 XX 15-JAN-2003; 2003US-00345444.
 XX
 XX 13-AUG-1997; 97US-00910629.
 PR 07-AUG-1998; 98US-00130616.
 PR 07-APR-1999; 99US-00287796.
 PR 15-SEP-1999; 99US-00396902.
 PR 31-JAN-2001; 2001US-00774809.
 XX
 XX (MCKA/) MCKAY R.
 PA (DEAN/) DEAN N M.
 PA (MONI/) MONIA B P.
 PA (NERO/) NERO P S.
 PA (GAAR/) GAARDE W A.
 XX
 XX Mckay R, Dean NM, Monia BP, Nero PS, Gaarde WA;
 XX WPI; 2004-168941/16.
 XX
 XX New oligonucleotides, which specifically hybridizes with Jun N-terminal
 PT kinase protein, useful in diagnosing or treating inflammation, fibrosis
 PT or a fibrotic or hyperproliferative disease or condition.
 XX
 XX Claim 25; SEQ ID NO 31; 71pp; English.
 XX
 XX The invention relates to an oligonucleotide comprising 8-30 nucleotides
 CC connected by covalent linkages, where the oligonucleotide has a sequence
 CC specifically hybridisable with a nucleic acid encoding a Jun N-terminal
 CC kinase (JNK) protein and modulates the expression of the JNK protein. The
 CC invention also relates to a pharmaceutical composition comprising the
 CC oligonucleotide(s) or its bioequivalent and a pharmaceutical carrier, a
 CC method of treating an animal having, suspected of having or prone to
 CC having a hyperproliferative disease, a method of modulating the
 CC expression of a JNK protein in cells or tissues, a method of modulating the
 CC cell cycle progression, phosphorylation of a protein phosphorylated by a
 CC JNK protein and expression of a cellular protein that promotes one or
 CC more metastatic events in cultured cells or the cells of an animal, a
 CC method of inhibiting the growth of a tumour in an animal, a method of
 CC inducing apoptosis in a cell, a method of treating a human having a
 CC disease or condition characterised by a reduction in apoptosis and a
 CC method of treating an animal having a disease or condition associated
 CC with a JNK protein. The oligonucleotide and composition are useful in
 CC diagnosing or treating a disease or condition characterised by a
 CC reduction in apoptosis (e.g. prostate cancer), a disease or condition
 CC associated with a JNK protein (e.g. inflammation, fibrosis), a fibrotic
 CC disease or condition (e.g. scarring, peritoneal adhesions, lung fibrosis,
 CC conjunctival scarring) or a hyperproliferative disease or condition (e.g.
 CC cancer), or in inhibiting the growth of a tumour. This sequence
 CC represents a human JNK2 oligonucleotide of the invention.
 XX
 XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.7e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGGCCCG 1049
 |||||
 Db 20 GACTTTGGCTGGCCCG 4
 RESULT 137
 ADN48331
 ID ADN48331 standard; DNA; 20 BP.
 XX
 AC ADN48331;
 XX
 DT 01-JUL-2004 (first entry)
 XX
 XX Human Jun N-terminal kinase 2 (JNK2) oligonucleotide #14.
 XX
 KW Human; Jun N-terminal kinase; JNK; Jun N-terminal kinase 2; JNK2;
 KW hyperproliferative disease; cell cycle progression;
 KW protein phosphorylation; tumour growth; cancer; apoptosis;
 KW prostate cancer; inflammation; fibrosis; fibrotic disease; scarring;
 KW peritoneal adhesion; lung fibrosis; conjunctival scarring; cytostatic;
 KW antiinflammatory; vulnery; ss.
 XX
 OS Homo sapiens.
 XX
 XX US2004029823-A1.
 XX
 XX 12-FEB-2004.
 XX
 XX 15-JAN-2003; 2003US-00345444.
 XX
 XX 13-AUG-1997; 97US-00910629.
 PR 07-AUG-1998; 98US-00130616.
 PR 07-APR-1999; 99US-00287796.
 PR 15-SEP-1999; 99US-00396902.
 PR 31-JAN-2001; 2001US-00774809.
 XX
 XX (MCKA/) MCKAY R.
 PA (DEAN/) DEAN N M.
 PA (MONI/) MONIA B P.
 PA (NERO/) NERO P S.
 PA (GAAR/) GAARDE W A.
 XX
 XX Mckay R, Dean NM, Monia BP, Nero PS, Gaarde WA;
 XX WPI; 2004-168941/16.
 XX
 XX New oligonucleotides, which specifically hybridizes with Jun N-terminal
 PT kinase protein, useful in diagnosing or treating inflammation, fibrosis
 PT or a fibrotic or hyperproliferative disease or condition.
 XX
 XX Example 4; SEQ ID NO 42; 71pp; English.
 XX
 XX The invention relates to an oligonucleotide comprising 8-30 nucleotides
 CC connected by covalent linkages, where the oligonucleotide has a sequence
 CC specifically hybridisable with a nucleic acid encoding a Jun N-terminal
 CC kinase (JNK) protein and modulates the expression of the JNK protein. The
 CC invention also relates to a pharmaceutical composition comprising the
 CC oligonucleotide(s) or its bioequivalent and a pharmaceutical carrier, a
 CC method of treating an animal having, suspected of having or prone to
 CC having a hyperproliferative disease, a method of modulating the
 CC expression of a JNK protein in cells or tissues, a method of modulating the
 CC cell cycle progression, phosphorylation of a protein phosphorylated by a
 CC JNK protein and expression of a cellular protein that promotes one or
 CC more metastatic events in cultured cells or the cells of an animal, a
 CC method of inhibiting the growth of a tumour in an animal, a method of
 CC inducing apoptosis in a cell, a method of treating a human having a
 CC disease or condition characterised by a reduction in apoptosis and a
 CC method of treating an animal having a disease or condition associated
 CC with a JNK protein. The oligonucleotide and composition are useful in
 CC diagnosing or treating a disease or condition characterised by a
 CC reduction in apoptosis (e.g. prostate cancer), a disease or condition
 CC associated with a JNK protein (e.g. inflammation, fibrosis), a fibrotic
 CC disease or condition (e.g. scarring, peritoneal adhesions, lung fibrosis,
 CC conjunctival scarring) or a hyperproliferative disease or condition (e.g.
 CC cancer), or in inhibiting the growth of a tumour. This sequence
 CC represents a human JNK2 oligonucleotide of the invention.
 XX

CC promotes one or more metastatic events in cultured cells or the cells of
CC an animal) by administering the oligonucleotide to the cells, inhibiting
CC the growth of a tumour in an animal by administering the oligonucleotide,
CC inducing apoptosis in a cell by contacting a cell with an AS
CC oligonucleotide for JNK2 and treating a human having a disease or
CC condition associated with a JNK protein or characterised by a reduction
CC in apoptosis by administering a prophylactic or therapeutic amount of the
CC AS oligonucleotide. The antisense oligonucleotide is useful for treating
CC a disease or condition characterised by a reduction in apoptosis, such as
CC prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic
CC disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung
CC fibrosis or conjunctival scarring), hyperproliferative disease or
CC condition, such as cancer. The antisense oligonucleotides may also be
CC used as research agents and diagnostic aids, to detect the presence of
CC JNK protein-specific nucleic acids in a cell or tissue sample, and to
CC study the function of one or more genes in the animal. The present
CC sequence is an antisense oligonucleotide targeting human JNK2.
XX
SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049
|||||
Db 20 GACTTTGGCCTGGCCCG 4

RESULT 134
ACD99615/c
ID ACD99615 standard; DNA; 20 BP.

XX ACD99615;

DT 25-SEP-2003 (first entry)

DE Immunostimulatory nucleic acid #301.

XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.

XX Synthetic.

XX US2003050268-A1.

XX 13-MAR-2003.

XX 29-MAR-2002; 2002US-00112653.

XX 29-MAR-2001; 2001US-0279642P.

XX (KRIE/) KRIEG A. M.

XX (BERG/) BERG D J.

XX Krieg AM, Berg DJ;

XX WPI; 2003-521815/49.

XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.

XX Disclosure; Page 16; 229pp; English.

XX The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or

CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid

XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049
|||||
Db 20 GACTTTGGCCTGGCCCG 4

RESULT 135
ADB36685/c
ID ADB36685 standard; DNA; 20 BP.

XX ADB36685;

XX 04-DEC-2003 (first entry)

XX Immunostimulatory nucleic acid #299.

XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
KW hypo-responsive subject; immunostimulatory.

XX Synthetic.

XX US2003087848-A1.

XX 08-MAY-2003.

XX 02-FEB-2001; 2001US-00776479.

XX 03-FEB-2000; 2000US-0179991P.

XX (BRAT/) BRATZLER R L.

XX (PETE/) PETERSEN D M.

XX (FOUR/) FOURON Y.

XX Bratzler RL, Petersen DM, Fouron Y;

XX WPI; 2003-657977/62.

XX Treating and/or preventing allergy or asthma using an immunostimulatory
PT nucleic acid alone or in combination with an asthma/allergy medicament.

XX Disclosure; Page 9; 221pp; English.

XX The invention relates to a method of treating or preventing allergy or
CC asthma which comprises administering to a subject a poly-G nucleic acid
CC in an aerosol formulation. The methods and compositions of the present
CC invention are useful for diagnosing and/or treating asthma and allergy
CC especially in a hypo-responsive subject. The present sequence represents
CC an immunostimulatory nucleic acid of the invention.

XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCCTGGCCCG 1049
|||||
Db 20 GACTTTGGCCTGGCCCG 4

RESULT 136
ADN48320/c
ID ADN48320 standard; DNA; 20 BP.

XX ADN48320;

DE Human JNK2 sense control oligonucleotide ISIS12560.
XX ss; human; Jun N-terminal kinase; JNK1; JNK2; JNK3; cytostatic;
KW antiinflammatory; apoptosis; prostate cancer; prostate tumour;
KW inflammation; fibrosis; fibrotic disease; fibrotic scarring;
KW peritoneal adhesion; lung fibrosis; conjunctival scarring;
KW hyperproliferative disease; cancer; probe.
XX Homo sapiens.
XX ADA26578/c
DN US2003004120-A1.
XX 02-JAN-2003.
XX 31-JAN-2001; 2001US-00774809.
XX 13-AUG-1997; 97US-00910629.
PR 07-AUG-1998; 98US-00130616.
PR 07-APR-1999; 99US-00287796.
PR 15-SEP-1999; 99US-00396902.
XX (MCKA/) MCKAY R.
PA (DEAN/) DEAN N M.
PA (MONI/) MONIA B P.
PA (NERO/) NERO P.
PA (GAAR/) GAARDE W A.
XX Mckay R, Dean NM, Monia BP, Nero P, Gaarde WA;
PI WPI; 2003-311908/30.
XX New oligonucleotides which hybridizes to, and modulates the expression of
PT Jun N-terminal kinase, useful for treating a disease or condition
PT characterized by a reduction in apoptosis, e.g. prostate cancer,
PT inflammation or fibrosis.
XX Example 4; Page 26; 69pp; English.
XX The invention relates to an oligonucleotide (antisense, AS) comprising 8-
CC 30 nucleotides connected by covalent linkages, where the oligonucleotide
CC has a sequence specifically hybridisable with a nucleic acid encoding a
CC Jun N-terminal kinase (JNK) protein and modulates the expression of the
CC JNK protein. Also included are a pharmaceutical composition comprising
CC the AS oligonucleotide (or its bioequivalent, and a pharmaceutical
CC carrier), treating an animal having/suspected of having/prone to having a
CC hyperproliferative disease (by administering to a prophylactic or
CC therapeutic amount of the composition of the AS oligonucleotide),
CC modulating the expression of a JNK protein in cells or tissues by
CC contacting the cells or tissues with the AS oligonucleotide, modulating
CC the cell cycle progression (or the phosphorylation of a protein
CC phosphorylated by a JNK protein, or expression of a cellular protein that
CC promotes one or more metastatic events in cultured cells or the cells of
CC an animal) by administering the oligonucleotide to the cells, inhibiting
CC the growth of a tumour in an animal by administering the oligonucleotide,
CC inducing apoptosis in a cell by contacting a cell with an AS
CC oligonucleotide for JNK2 and treating a human having a disease or
CC condition associated with a JNK protein or characterised by a reduction
CC in apoptosis by administering a prophylactic or therapeutic amount of the
CC AS oligonucleotide. The antisense oligonucleotide is useful for treating
CC a disease or condition characterised by a reduction in apoptosis, such as
CC prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic
CC disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung
CC fibrosis or conjunctival scarring), hyperproliferative disease or
CC condition, such as cancer. The antisense oligonucleotides may also be
CC used as research agents and diagnostic aids, to detect the presence of
CC JNK protein-specific nucleic acids in a cell or tissue sample, and to
CC study the function of one or more genes in the animal. The present
CC sequence is a sense control oligonucleotide for antisense
CC oligonucleotides targeting a human JNK.
XX Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
SQ Query Match 1.0%; Score 17; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1033 GACTTTGGCTGGCCCG 1049
Db 1 GACTTTGGCTGGCCCG 17
RESULT 133
ADA26578/c
ID ADA26578 standard; DNA; 20 BP.
XX ADA26578;
AC ADA26578;
XX 20-NOV-2003 (first entry)
XX Human Jun N-terminal kinase, JNK2, antisense oligonucleotide ISIS12560.
DE ss; human; Jun N-terminal kinase; JNK1; JNK2; JNK3; antisense;
XX cytostatic; antiinflammatory; apoptosis; prostate cancer;
KW prostate tumour; inflammation; fibrosis; fibrotic disease;
KW fibrotic scarring; peritoneal adhesion; lung fibrosis;
KW conjunctival scarring; hyperproliferative disease; cancer; probe.
XX Homo sapiens.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate linkages"
XX US2003004120-A1.
XX 02-JAN-2003.
XX 31-JAN-2001; 2001US-00774809.
XX 13-AUG-1997; 97US-00910629.
PR 07-AUG-1998; 98US-00130616.
PR 07-APR-1999; 99US-00287796.
PR 15-SEP-1999; 99US-00396902.
XX (MCKA/) MCKAY R.
PA (DEAN/) DEAN N M.
PA (MONI/) MONIA B P.
PA (NERO/) NERO P.
PA (GAAR/) GAARDE W A.
XX Mckay R, Dean NM, Monia BP, Nero P, Gaarde WA;
PI WPI; 2003-311908/30.
XX New oligonucleotides which hybridizes to, and modulates the expression of
PT Jun N-terminal kinase, useful for treating a disease or condition
PT characterized by a reduction in apoptosis, e.g. prostate cancer,
PT inflammation or fibrosis.
XX Claim 25; Page 25; 69pp; English.
XX The invention relates to an oligonucleotide (antisense, AS) comprising 8-
CC 30 nucleotides connected by covalent linkages, where the oligonucleotide
CC has a sequence specifically hybridisable with a nucleic acid encoding a
CC Jun N-terminal kinase (JNK) protein and modulates the expression of the
CC JNK protein. Also included are a pharmaceutical composition comprising
CC the AS oligonucleotide (or its bioequivalent, and a pharmaceutical
CC carrier), treating an animal having/suspected of having/prone to having a
CC hyperproliferative disease (by administering to a prophylactic or
CC therapeutic amount of the composition of the AS oligonucleotide),
CC modulating the expression of a JNK protein in cells or tissues by
CC contacting the cells or tissues with the AS oligonucleotide, modulating
CC the cell cycle progression (or the phosphorylation of a protein
CC phosphorylated by a JNK protein, or expression of a cellular protein that
CC promotes one or more metastatic events in cultured cells or the cells of
CC an animal) by administering the oligonucleotide to the cells, inhibiting
CC the growth of a tumour in an animal by administering the oligonucleotide,
CC inducing apoptosis in a cell by contacting a cell with an AS
CC oligonucleotide for JNK2 and treating a human having a disease or
CC condition associated with a JNK protein or characterised by a reduction
CC in apoptosis by administering a prophylactic or therapeutic amount of the
CC AS oligonucleotide. The antisense oligonucleotide is useful for treating
CC a disease or condition characterised by a reduction in apoptosis, such as
CC prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic
CC disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung
CC fibrosis or conjunctival scarring), hyperproliferative disease or
CC condition, such as cancer. The antisense oligonucleotides may also be
CC used as research agents and diagnostic aids, to detect the presence of
CC JNK protein-specific nucleic acids in a cell or tissue sample, and to
CC study the function of one or more genes in the animal. The present
CC sequence is a sense control oligonucleotide for antisense
CC oligonucleotides targeting a human JNK.

CC C63000, AAA96093-A96099 and AAA07993) that hybridise specifically to a
CC nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in
CC decrease of JNK2 expression and leading to induction of apoptosis. The
CC present sequence is one such antisense oligonucleotide. The
CC oligonucleotides of the present invention are useful for treating
CC diseases or conditions with reduced apoptosis, e.g. cancer and cellular
CC hyperproliferation. The oligonucleotides may also be used to increase the
CC stimulation of apoptotic proteins, e.g. for treating Alzheimer's or
CC Parkinson's disease, amyotrophic lateral sclerosis, retinitis,
CC pigmentosa, epilepsy, myocardial infarction, stroke, obstructive
CC jaundice, polycystic kidney and diabetes. The present sequence may have a
CC phosphorothioate backbone

XX SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.7e+02; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 0;

QY 1033 GACTTTGGCCTGGCCCG 1049
Db 20 GACTTTGGCCTGGCCCG 4

RESULT 128

AAH23754/c
ID AAH23754 standard; DNA; 20 BP.

XX AC AAH23754;

XX DT 13-AUG-2001 (first entry)

XX DE JNK1 antisense oligonucleotide, JNK2AS, (ISIS #12560).

XX XW JNK; jun kinase; antisense; cytostatic; cancer;

XX KW 2'-O-methoxyethyl oligonucleotide; MOE; phosphorothioate; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "This oligonucleotide is a 2'-O-methoxyethyl (MOE)
FT chimeric antisense oligonucleotide containing five
FT MOE/phosphodiester residues flanking a 2'-
FT deoxynucleotide/phosphorothioate region"

XX PN WO200134792-A2.

XX PD 17-MAY-2001.

XX PF 10-NOV-2000; 2000WO-US030869.

XX PR 12-NOV-1999; 99US-0165224P.

XX PA (USSH) US DEPT HEALTH & HUMAN SERVICES.

XX PI Potapova O, Gorospe M, Holbrook NJ;

XX DR WPI; 2001-335925/35.

XX PT Use of Jun Kinase antisense mRNA for treating cancer by administering
XX vector comprising promoter operably linked to DNA sequence that encodes
XX the antisense mRNA to patient diagnosed with cancer.

XX PS Claim 1; Page 41; 75pp; English.

XX CC The present invention relates to the use of Jun Kinase (JNK) antisense
XX oligonucleotides for treating cancer and for screening compounds that
XX mimic or augment the effect of JNK antisense oligonucleotides treatment
XX for cancer. The present sequence is one such JNK antisense
XX oligonucleotide

XX SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.7e+02; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 0;

QY 1033 GACTTTGGCCTGGCCCG 1049
Db 20 GACTTTGGCCTGGCCCG 4

RESULT 129

AAF99183/c
ID AAF99183 standard; DNA; 20 BP.

XX AC AAF99183;

XX DT 12-JUN-2001 (first entry)

XX DE Immunostimulatory nucleic acid #299.

XX XW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
XX immunostimulatory; tumour; viral infection; bacterial infection;
XX fungal infection; parasitic infection; cancer; asthma;
XX KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.

XX OS Synthetic.

XX PN WO200122972-A2.

XX PD 05-APR-2001.

XX PF 25-SEP-2000; 2000WO-US026383.

XX PR 25-SEP-1999; 99US-0156113P.

XX PR 27-SEP-1999; 99US-0156135P.

XX PR 23-AUG-2000; 2000US-0227436P.

XX PA (IOWA) UNIV IOWA RES FOUND.

XX PF (COLE-) COLEY PHARM GMBH.

XX PI Krieg AM, Schetter C, Vollmer J;

XX WPI; 2001-273485/28.

XX PT Vaccinating against tumors, infectious diseases, allergies and asthma
XX using immunostimulatory Py-rich and TG nucleic acids.

XX PS Claim 101; Page 44; 338pp; English.

XX CC The present invention relates to a method for stimulating an immune
XX response. The method comprises administering an immunostimulatory nucleic
XX acid to a non-rodent subject in sufficient quantity to stimulate an
XX immune response. The present sequence is one such immunostimulatory
XX nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX also useful for preventing cancer, asthma, infectious disease, allergy or
XX immune deficiency. The present sequence can also be used to redirect a
XX Th2 to a Th1 immune response and to activate immune cells. Note: the
XX present sequence may have a phosphorothioate backbone

XX SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.7e+02; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 0;

QY 1033 GACTTTGGCCTGGCCCG 1049

PF 08-DEC-1999; 99WO-US028965.
XX
PR 10-DEC-1998; 98US-00209668.
XX
XX (ISIS-) ISIS PHARM INC.
XX Monia BP, Xu XS;
PI
XX
DR WPI; 2000-423367/36.
XX
XX Modulating cell adhesion molecule expression for treating immune or
PT inflammatory diseases involves treating cell with specific inhibitor of
PT Tumor Necrosis Factor alpha signaling molecule.
XX
XX Claim 36; Page 46; 100pp; English.
XX
XX A novel method for modulating cell adhesion molecule expression involves
CC antisense inhibition of a tumour necrosis factor (TNF) alpha signalling
CC molecule. In the method TNF alpha signalling molecules Ha-ras, c-raf and
CC c-Jun N-terminal kinase (JNK)2 were inhibited by antisense
CC oligonucleotides. In addition an antisense oligonucleotide to the cell
CC adhesion molecule E-selectin was also examined. The present sequence is
CC the JNK2 antisense oligonucleotide. The antisense oligonucleotides used
CC in the method contained modifications, namely phosphorothioate linkages
CC and 2'methoxyethoxy bases. Some C residues also had a 5'methyl
CC modification. Inhibitors of the TNF alpha signalling molecules have
CC antibacterial, immunosuppressive, antiproliferative, antidiabetic,
CC antithyroid, cytostatic, dermatological, antiallergic and
CC antiinflammatory activity. The antisense inhibitors may be useful for the
CC treatment of sepsis, rheumatoid arthritis, inflammatory, immune disease,
CC inflammatory bowel disease, allergic contact dermatitis, psoriasis,
XX diabetes, Grave's disease, allograft rejection and cancer
XX
SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1033 GACTTTGGCCTGGCCCG 1049
|||||
Db 20 GACTTTGGCCTGGCCCG 4
RESULT 126
AAC62885
ID AAC62885 standard; DNA; 20 BP.
XX
AC AAC62885;
XX
DT 06-FEB-2001 (first entry)
XX
DE JNK antisense oligonucleotide ISIS #14318.
XX
XX Antisense; gene therapy; JNK2 protein; apoptosis; cancer;
KW cellular hyperproliferation; Alzheimer's; Parkinson's disease;
KW amyotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;
KW myocardial infarction; stroke; obstructive jaundice; polycystic kidney;
KW diabetes; Jun N-terminal kinase; ss.
XX
OS Homo sapiens.
XX
FN WO200059549-A1.
XX
PD 12-OCT-2000.
XX
PF 04-APR-2000; 2000WO-US008880.
XX
PR 07-APR-1999; 99US-00287796.
XX
XX (ISIS-) ISIS PHARM INC.
XX
PI McKay R, Dean NM, Monia BP, Nero PS, Gaarde WA;
XX
XX WPI; 2000-423367/36.
XX
XX Novel methods for reducing apoptosis comprising contacting cells with
PT antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
PT cancer.
XX
XX Claim 3; Page 133; 160pp; English.
XX
XX The present invention relates to antisense oligonucleotides (AAC62844-

XX WPI; 2000-638427/61.
DR
XX Novel methods for reducing apoptosis comprising contacting cells with
PT antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
PT cancer.
XX
XX Example 4; Page 135; 160pp; English.
XX
XX The present invention relates to antisense oligonucleotides (AAC62844-
CC C63000, AAA96093-A96099 and AAA07993) that hybridise specifically to a
CC nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in
CC decrease of JNK2 expression and leading to induction of apoptosis. The
CC present sequence is one such antisense oligonucleotide. The
CC oligonucleotides of the present invention are useful for treating
CC diseases or conditions with reduced apoptosis, e.g. cancer and cellular
CC hyperproliferation. The oligonucleotides may also be used to increase the
CC stimulation of apoptotic proteins, e.g. for treating Alzheimer's or
CC Parkinson's disease, amyotrophic lateral sclerosis, retinitis,
CC pigmentosa, epilepsy, myocardial infarction, stroke, obstructive
CC jaundice, polycystic kidney and diabetes. The present sequence may have a
CC phosphorothioate backbone
XX
SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 1.0%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1033 GACTTTGGCCTGGCCCG 1049
|||||
Db 1 GACTTTGGCCTGGCCCG 17
RESULT 127
AAC62874/C
ID AAC62874 standard; DNA; 20 BP.
XX
XX AAC62874;
AC
XX
DT 06-FEB-2001 (first entry)
XX
DE JNK antisense oligonucleotide ISIS #12560.
XX
XX Antisense; gene therapy; JNK2 protein; apoptosis; cancer;
KW cellular hyperproliferation; Alzheimer's; Parkinson's disease;
KW amyotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;
KW myocardial infarction; stroke; obstructive jaundice; polycystic kidney;
KW diabetes; Jun N-terminal kinase; ss.
XX
OS Homo sapiens.
XX
FN WO200059549-A1.
XX
PD 12-OCT-2000.
XX
PF 04-APR-2000; 2000WO-US008880.
XX
PR 07-APR-1999; 99US-00287796.
XX
XX (ISIS-) ISIS PHARM INC.
XX
PI McKay R, Dean NM, Monia BP, Nero PS, Gaarde WA;
XX
XX WPI; 2000-638427/61.
XX
XX Novel methods for reducing apoptosis comprising contacting cells with
PT antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
PT cancer.
XX
XX Claim 3; Page 133; 160pp; English.
XX
XX The present invention relates to antisense oligonucleotides (AAC62844-

KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX WO200130362-A2.
XX PD 03-MAY-2001.
XX PF 26-OCT-2000; 2000WO-US029500.
XX PR 26-OCT-1999; 99US-0161532P.
XX PA (IMMU-) IMMUSOL INC.
XX PI Robbins JM, Tritz R;
XX DR WPI; 2001-300427/31.
XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 97; 408pp; English.
XX The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiproliferative,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiskinning,
CC ophthalmological, vulnary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 2.2e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1028 TGGCTGACTTGGCTGGC 1046
DB 1 TGGCTGACTTGGCTGGC 19
RESULT 122
ACI39576
ID ACI39576 standard; DNA; 25 BP.
XX
AC ACI39576;
XX
DT 13-OCT-2003 (first entry)
XX
DE Human microarray DNA oligonucleotide SEQ ID NO 39567.
XX
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX
XX Homo sapiens.
XX OS
XX PN US2003104410-A1.
XX

XX 05-JUN-2003.
XX PD
XX PF 15-MAR-2002; 2002US-00098263.
XX PR 16-MAR-2001; 2001US-0276759P.
XX PA (AFFY-) AFFYMETRIX INC.
XX PI Mittmann MP;
XX DR WPI; 2003-567953/53.
XX PT New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX
PS Claim 1; SEQ ID NO 39567; 9pp; English.
XX The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC nucleic acids further comprises a tag sequence. The array of nucleic acid
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: the sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
XX
SQ Sequence 25 BP; 7 A; 5 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.2; DB 1; Length 25;
Best Local Similarity 86.4%; Pred. No. 3e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1256 TAGGAACCCCACTGAGGAGAC 1277
DB 4 TAGGACTCGAATGAGGAGAC 25
RESULT 123
AA29342
ID AA29342 standard; DNA; 20 BP.
XX
AC AA29342;
XX
DT 10-JUN-1999 (first entry)
XX
DE Chemically modified sense control probe ISIS No: 14318.
XX
KW Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1;
KW JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe;
KW hyperproliferative disease; human; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
XX PN WO9909214-A1.
XX

```

ID AAA82757 standard; DNA; 19 BP.
XX AC AAA82757;
XX DT 04-DEC-2000 (first entry)
XX DE cdk3 ribozyme binding site #42.
XX KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX OS Mammalia.
XX PN WO200032765-A2.
XX PD 08-JUN-2000.
XX PF 06-DEC-1999; 99WO-US028772.
XX PR 04-DEC-1998; 98US-0110954P.
XX PA (IMMU-) IMMUSOL INC.
XX PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX DR WPI; 2000-412314/35.
XX PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
XX PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PT PCNA and Cyclin B1.
XX PS Disclosure; Page 51; 109pp; English.
XX CC The present invention relates to a hairpin or hammerhead ribozyme,
XX CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX CC Representative examples of ribozyme recognition sites are given in
XX CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
XX CC inhibiting restenosis by introduction of the ribozyme into cells. The
XX CC ribozyme is resistant to endonuclease activity and hence is efficient in
XX CC restenosis treatment
XX SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 2.2e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 993 GAACCTGCTCATCAACGAG 1011
Db 1 GAACCTGCTCATCAATGAG 19
RESULT 120
AAH57919
ID AAH57919 standard; DNA; 19 BP.
XX AC AAH57919;
XX DT 10-SEP-2001 (first entry)
XX DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:343.
XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX KW recognition site; target; ribozyme binding site; eye disease; vulnary;
XX KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX KW antipapillary; dermatological; antiseborrheic; antidiabetic; virucide;
XX KW antiskinning; ophthalmological; keratolytic; gene therapy; viral wart;
XX KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX KW sickle cell retinopathy; ss.

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OS Homo sapiens.
OS Synthetic.
XX PN WO200130362-A2.
XX PD 03-MAY-2001.
XX PF 26-OCT-2000; 2000WO-US029500.
XX PR 26-OCT-1999; 99US-0161532P.
XX PA (IMMU-) IMMUSOL INC.
XX PI Robbins JM, Tritz R;
XX DR WPI; 2001-300427/31.
XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PS Example 1; Page 96; 408pp; English.
XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II), comprising a promoter operably linked to a
XX CC nucleic acid segment encoding (I). (I) can have antipapillary,
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiskinning, and
XX CC ophthalmological, vulnary, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention
XX SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 2.2e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 993 GAACCTGCTCATCAACGAG 1011
Db 1 GAACCTGCTCATCAATGAG 19
RESULT 121
AAH57923
ID AAH57923 standard; DNA; 19 BP.
XX AC AAH57923;
XX DT 10-SEP-2001 (first entry)
XX DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:347.
XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX KW recognition site; target; ribozyme binding site; eye disease; vulnary;
XX KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX KW antipapillary; dermatological; antiseborrheic; antidiabetic; virucide;
XX KW antiskinning; ophthalmological; keratolytic; gene therapy; viral wart;
XX KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;

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PR 10-JUN-2002; 2002US-0387429P.
PR 10-JUN-2002; 2002US-0387540P.
PR 10-JUN-2002; 2002US-0387666P.
PR 11-JUN-2002; 2002US-0387608P.
PR 11-JUN-2002; 2002US-0387610P.
PR 11-JUN-2002; 2002US-0387659P.
PR 11-JUN-2002; 2002US-0387668P.
PR 11-JUN-2002; 2002US-0387696P.
PR 11-JUN-2002; 2002US-0387859P.
PR 12-JUN-2002; 2002US-0387934P.
PR 12-JUN-2002; 2002US-0387960P.
PR 12-JUN-2002; 2002US-0388022P.
PR 12-JUN-2002; 2002US-0388096P.
PR 12-JUN-2002; 2002US-0388432P.
PR 12-JUN-2002; 2002US-0388479P.
PR 13-JUN-2002; 2002US-0389123P.
PR 14-JUN-2002; 2002US-0389120P.
PR 14-JUN-2002; 2002US-0389146P.
PR 17-JUN-2002; 2002US-0389742P.
PR 18-JUN-2002; 2002US-0389604P.
PR 18-JUN-2002; 2002US-0389884P.
PR 19-JUN-2002; 2002US-0390006P.
PR 19-JUN-2002; 2002US-0390144P.
PR 19-JUN-2002; 2002US-0390209P.
PR 25-JUN-2002; 2002US-0391726P.
PR 06-AUG-2002; 2002US-0401628P.
PR 09-AUG-2002; 2002US-0402268P.
PR 12-AUG-2002; 2002US-0402822P.
PR 13-AUG-2002; 2002US-0403458P.
PR 15-AUG-2002; 2002US-0403617P.
PR 15-AUG-2002; 2002US-0403732P.
PR 26-AUG-2002; 2002US-0406182P.
PR 12-SEP-2002; 2002US-0410085P.
PR 13-SEP-2002; 2002US-0410505P.
PR 23-SEP-2002; 2002US-0412955P.
PR 30-SEP-2002; 2002US-0415195P.
PR 23-OCT-2002; 2002US-0420627P.
PR 23-OCT-2002; 2002US-0420718P.
PR 24-OCT-2002; 2002US-0420852P.
PR 31-OCT-2002; 2002US-0422750P.
PR 01-NOV-2002; 2002US-0423095P.
PR 05-NOV-2002; 2002US-0423748P.
PA (CURA-) CURAGEN CORP.
XX
XX
XX Alsobrook JP, Anderson DW, Baumgartner JC, Berghs C, Boldog FL;
PI Burgess CE, Casman SJ, Catterton E, Dhanabal M, Edinger SR;
PI Ellerman K, Ettenberg S, Gangolli EA, Gerlach VL, Gorman L;
PI Grosse WM, Gunther E, Guo X, Gusev VY, Herrmann JL, Ji W, Kekuda R;
PI Khrantsov NV, Larochelle WJ, Li L, Liang H, Low K, Macdougall JR;
PI MacLachlan T, Malyankar UM, Mcqueeney X, Mezick AJ, Miller CE;
PI Millet I, Padigaru M, Patturajan M, Peyman JA, Qian X, Rastelli L;
PI Rieger DK, Rothenberg ME, Shenoy SG, Shinkets RA, Smithson G;
PI Spytek KA, Stone DU, Sukumaran S, Szekeres ES, Vernet CAM, Voss EZ;
PI Wolenc AR, Zhong M, Zhong H;
XX
XX WPI; 2004-053467/05.
XX
XX
XX New NOVX polypeptides and nucleic acid molecules useful for preventing or
PT treating NOVX-associated disorders, e.g. cancer, cardiomyopathy,
PT atherosclerosis or diabetes, in chromosome mapping, tissue typing or in
PT pharmacogenomics.
XX
XX Disclosure; SEQ ID NO 1453; 1503pp; English.
PS
XX
XX The invention relates to 566 new isolated human polypeptides and their
CC encoding genes, sequences that are at least 95% identical to these or
CC sequences comprising one or more conservative substitutions in these. The
CC polypeptide, polynucleotide and antibodies against the polypeptides are
CC useful in diagnosing, treating or preventing NOVX-associated disorders,
CC e.g. cardiomyopathy, atherosclerosis, hypertension, cancer, obesity,
CC diabetes, AIDS, multiple sclerosis, graft-versus-host disease,
CC Alzheimer's disease, Parkinson's disease, asthma, or fertility disorders.

CC The nucleic acids are further used as hybridization probes, in chromosome
CC mapping, tissue typing, preventive medicine, and pharmacogenomics. The
CC polypeptides are also useful as vaccines. This sequence represents an
CC example of a probe used to isolate the nucleic acid sequences of the
CC invention.
XX
SQ Sequence 26 BP; 10 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.6; DB 1; Length 26;
Best Local Similarity 83.3%; Pred. No. 2.7e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 972 ACACGAGACCTCAAGCCCGAGAA 995
Db 1 ATACCGAGACCTGAACCCCAAA 24
RESULT 118
AAA82761
ID AAA82761 standard; DNA; 19 BP.
XX
XX AAA82761;
AC
XX
XX 04-DEC-2000 (first entry)
DT
XX
XX cdk3 ribozyme binding site #46.
DE
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
KW
XX
XX Mammalia.
OS
XX
XX WO200032765-A2.
PN
XX
XX 08-JUN-2000.
PD
XX
XX 06-DEC-1999; 99WO-US028772.
PF
XX
XX 04-DEC-1998; 98US-0110954P.
PR
XX
XX (IMMU-) IMMUSOL INC.
PA
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JW;
PI
XX
XX WPI; 2000-412314/35.
DR
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
PS
XX
XX Disclosure; Page 51; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
SQ Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 2.2e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1028 TGGCTGACTTTGGCGCTGCG 1046
Db 1 TGGCTGACTTTGGCGCTGCG 19
RESULT 119
AAA82757

KW Huntington's disease; cerebral palsy; Lesch-Nyhan syndrome; pain;
KW multiple sclerosis; ataxia-telangiectasia; leukodystrophy; anxiety;
KW behavioural disorder; addiction; neuroprotection; diabetes; ARDS;
KW renal artery stenosis; interstitial nephritis; glomerulonephritis;
KW polycystic kidney disease; systemic lupus erythematosus; IgA; probe;
KW renal tubular acidosis; immunoglobulin A nephropathy; hypercalcaemia;
KW cirrhosis; transplantation; asthma; emphysema; scleroderma; GVHD;
KW adult respiratory distress syndrome; graft versus host disease;
KW lymphedema; fertility; pancreatitis; obesity; haemophilia; ulcer;
KW anaemia; cancer; trauma; regeneration; infection; RTQ-PCR;
KW real-time quantitative PCR.
OS
XX Homo sapiens.
XX
XX WO200281629-A2.
XX
XX 17-OCT-2002.
XX
XX 03-APR-2002; 2002WO-US010522.
XX
XX 03-APR-2001; 2001US-0281086P.
XX 03-APR-2001; 2001US-0281136P.
XX 05-APR-2001; 2001US-0281863P.
XX 05-APR-2001; 2001US-0281906P.
XX 06-APR-2001; 2001US-0282020P.
XX 10-APR-2001; 2001US-0282934P.
XX 12-APR-2001; 2001US-0283512P.
XX 19-APR-2001; 2001US-0285325P.
XX 23-APR-2001; 2001US-0285890P.
XX 24-APR-2001; 2001US-0286068P.
XX 25-APR-2001; 2001US-0286292P.
XX 27-APR-2001; 2001US-0287213P.
XX 02-MAY-2001; 2001US-0288257P.
XX 12-MAY-2001; 2001US-0291134P.
XX 17-MAY-2001; 2001US-0291725P.
XX 31-MAY-2001; 2001US-0294771P.
XX 08-JUN-2001; 2001US-0296965P.
XX 18-JUN-2001; 2001US-0299128P.
XX 12-JUL-2001; 2001US-0305063P.
XX 14-NOV-2001; 2001US-0332780P.
XX 04-JAN-2002; 2002US-0345221P.
XX 02-APR-2002; 2002US-00345221.
XX
XX (CURA-) CURAGEN CORP.
XX
XX Spytek KA, Li L, Edinger SR, Ellerman K, Stone DJ, Malyankar UM;
PI Shimkets RA, Guo X, Anderson DW, Patturajan M, Berghs C, Gerlach V;
PI Taupier RJ, Pena CEA, Padigar M, Liu Y, Burgess CE, Miller CE;
PI Gusev VY, Kekuda R, Gorman L, Zerhusen BD, Baumgartner JC;
PI Tchernev VT, Vernet CAM, Smithson G, Heyes MP, Shency SG, Liu X;
PI Gangolli EA;
XX
XX WPI; 2003-046863/04.
XX
XX New polypeptides, designated NOVX polypeptides, useful for treating
PT hemophilia, idiopathic thrombocytopenic purpura, autoimmune disease,
PT allergies, transplantation, Alzheimer's disease and stroke.
XX
XX Example C; Page 264; 320pp; English.
XX
XX The invention relates to an isolated NOVX polypeptide selected from NOV1-
CC NOV27 polypeptides, a mature form of NOVX, a variant of NOVX or a
CC fragment of NOVX. Also included are determining the presence or amount of
CC NOVX in a sample (by using an antibody that immunospecifically bind to
CC the polypeptide), determining the presence of or predisposition to
CC disease associated with altered levels of NOVX in a first mammalian
CC subject, identifying a potential therapeutic agent for use in the
CC treatment of pathology related to aberrant expression of physiological
CC interactions of NOVX, screening for a modulator of activity or of latency
CC or predisposition to a pathology associated with NOVX, the nucleic acid
CC encoding NOVX, vectors and host cells. NOVX is useful for identifying an
CC agent (a cellular receptor or downstream effector) that binds to NOVX.
CC NOVX and NOVX nucleic acids are useful for treating or preventing NOVX-

CC associated disorders in humans, and in the manufacture of a medicament
CC for treating a NOVX related disease human disease e.g.
CC adrenoleukodystrophy, congenital adrenal hyperplasia, haemophilia,
CC hypercoagulation, idiopathic thrombocytopenic purpura, Von Hippel-
CC disease, allergies, immunodeficiencies, transplantation, Von Hippel-
CC Lindau (VHL) syndrome, Alzheimer's disease, stroke, tuborous sclerosis,
CC Parkinson's disease, Huntington's disease, cerebral palsy, epilepsy,
CC Lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangiectasia,
CC leukodystrophies, behavioural disorders, addiction, anxiety, pain,
CC neuroprotection, diabetes, renal artery stenosis, interstitial nephritis,
CC glomerulonephritis, polycystic kidney disease, systemic lupus
CC erythematosus, renal tubular acidosis, immunoglobulin (Ig) A nephropathy,
CC hypercalcaemia, cirrhosis, transplantation, asthma, emphysema,
CC scleroderma, adult respiratory distress syndrome (ARDS), graft versus
CC host disease (GVHD), lymphedema, fertility, pancreatitis, obesity,
CC haemophilia, ulcers, anaemia, cancer, trauma, regeneration, and viral,
CC bacterial or parasitic infections. The present sequence is a real-time
CC quantitative (RTQ)-PCR probe used to determine the tissue specific
CC expression of a NOVX mRNA
XX
XX Sequence 26 BP; 10 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
SQ
Query Match 1.0%; Score 17.6; DB 1; Length 26;
Best Local Similarity 83.3%; Pred. No. 2.7e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 972 ACACCGAGACCTCAAGCCCGAGAA 995
Db 1 ATACCGAGACCTGACCCGACAA 24
RESULT 117
ADH42900
ID ADH42900 standard; DNA; 26 BP.
XX
XX AC ADH42900;
XX
XX 25-MAR-2004 (first entry)
XX
XX Novel human nucleic acid NOVX gene probe Ag941.
XX
XX cardiovascular; antiarteriosclerotic; hypotensive; cytostatic; anorectic;
KW anti-diabetic; immunosuppressive; anti-HIV; neuroprotective; nootropic;
KW antiparkinsonian; antiasthmatic; antiinfertility; cardiomyopathy;
KW atherosclerosis; hypertension; cancer; obesity; diabetes; AIDS;
KW multiple sclerosis; graft-versus-host disease; Alzheimer's disease;
KW Parkinson's disease; asthma; fertility disorder; chromosome mapping;
XX tissue typing; preventive medicine; pharmacogenomic; vaccine; probe; ss.
OS Homo sapiens.
XX
XX WO2003102159-A2.
XX
XX 11-DEC-2003.
XX
XX 04-JUN-2003; 2003WO-US017573.
XX
XX 04-JUN-2002; 2002US-0385490P.
XX 04-JUN-2002; 2002US-0385615P.
XX 04-JUN-2002; 2002US-0385755P.
XX 05-JUN-2002; 2002US-0386041P.
XX 06-JUN-2002; 2002US-0386355P.
XX 06-JUN-2002; 2002US-0386357P.
XX 06-JUN-2002; 2002US-0386447P.
XX 06-JUN-2002; 2002US-0386459P.
XX 06-JUN-2002; 2002US-0386465P.
XX 06-JUN-2002; 2002US-0386864P.
XX 07-JUN-2002; 2002US-0386701P.
XX 07-JUN-2002; 2002US-0386796P.
XX 07-JUN-2002; 2002US-0386931P.
XX 07-JUN-2002; 2002US-0387078P.
XX 07-JUN-2002; 2002US-0387081P.
XX 07-JUN-2002; 2002US-0387083P.


```
XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS Homo sapiens.
XX
PN EP1229046-A2.
XX
PD 07-AUG-2002.
XX
PF 28-JAN-2002; 2002EP-00001167.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 23-MAY-2001; 2001US-00864761.
PR 09-OCT-2001; 2001US-0327898P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Zhan J;
XX
DR WPI; 2002-676582/73.
XX
PT Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
PS Example 2; Page 533; 718pp; English.
XX
CC The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and ABV98519 to ABV98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 25 BP; 7 A; 11 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 218 GCTCGATGAGAGTGGTGGTGGTG 241
DB 25 GCCAGAGTGTAGTGGTGGTG 2
RESULT 113
ACK27269/c
ID ACK27269 standard; DNA; 25 BP.
XX
AC ACK27269;
XX
DT 14-OCT-2003 (first entry)
DE Human microarray DNA oligonucleotide SEQ ID NO 83985.
XX
XX Human microarray DNA oligonucleotide SEQ ID NO 127250.
DE
XX EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX
OS Homo sapiens.
XX
PN US2003104410-A1.
XX
PD 05-JUN-2003.
XX
PF 15-MAR-2002; 2002US-00098263.
XX
PR 16-MAR-2001; 2001US-0276759P.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Mittmann MP;
XX
DR WPI; 2003-567953/53.
XX
PT New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX
PS Claim 1; SEQ ID NO 127250; 9pp; English.
XX
CC The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC nucleic acids further comprises a tag sequence. The array of nucleic acid
CC probes is useful in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
XX
SQ Sequence 25 BP; 8 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 794 TTACGCTACATGACATTATCCACA 817
DB 25 TTATGCGACATGACATTGTTTACA 2
RESULT 114
AC183994/c
ID AC183994 standard; DNA; 25 BP.
XX
AC AC183994;
XX
DT 14-OCT-2003 (first entry)
DE Human microarray DNA oligonucleotide SEQ ID NO 83985.
```



```
XX
PR 10-JUL-1996; 96US-00678039.
XX
PR (UTAH ) UNIV UTAH RES FOUND.
XX
XX Keating MT, Morris CA;
PI WPI; 1998-101185/09.
XX
XX Diagnosing Williams syndrome cognitive profile from hemizygosy of
PT LIMK1 - gene on chromosome 7 encoding new kinase, allowing
PT differentiation from classic Williams syndrome and supra-vascular aortic
PT stenosis.
XX
XX Example 3; Page 22; 62pp; English.
XX
XX This oligonucleotide was designed to amplify the region of homology in
CC the kinase domains of PDGF receptor, HER2, HER3, FGF-FUG, FGF-BEK,
CC insulin receptor and IRR. It was used with another kinase homology domain
CC -based primer (see AAV05314) in the amplification of human LIM-kinase 1
CC (LIMK1) sequences. The LIMK1 gene is composed of 16 exons (see AAV05315
CC and AAT9599-T99629) and is located 15.4 kb 3' of elastin in chromosome
CC 7. It encodes a novel protein kinase (see AAW46576). Williams syndrome
CC cognitive profile (WSCP) is detected by determining zygosy of the LIMK1
CC locus, with hemizygosy being indicative of impaired visuo-spatial
CC constructive cognition. Chromosome 7 deletion analysis allows
CC discrimination between WSCP, SVAS (supra-vascular aortic stenosis) and
CC Williams syndrome
XX
SQ Sequence 25 BP; 4 A; 6 C; 9 G; 6 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1033 GACTTTGGCTGCGCCGACCAAG 1056
DB 1 GACTTTGGCTGCGTCGACATG 24
RESULT 109
ABN15302
ID ABN15302 standard; DNA; 25 BP.
AC ABN15302;
XX
XX 29-MAY-2002 (first entry)
XX
XX Human GDMPLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15294.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX Homo sapiens.
XX
XX WO200192524-A2.
XX
XX 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX
XX 21-SEP-2000; 2000US-0234687P.
XX
XX 27-SEP-2000; 2000US-0236359P.
XX
XX 04-OCT-2000; 2000GB-00024263.
XX
XX 30-JAN-2001; 2001WO-US000661.
XX
XX 30-JAN-2001; 2001WO-US000662.
XX
XX 30-JAN-2001; 2001WO-US000663.
XX
XX 30-JAN-2001; 2001WO-US000664.
XX
XX 30-JAN-2001; 2001WO-US000665.
XX
XX 30-JAN-2001; 2001WO-US000666.
XX
XX 30-JAN-2001; 2001WO-US000667.
XX
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 15294; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 25 BP; 2 A; 11 C; 4 G; 8 T; 0 U; 0 Other;
Query Match 1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 555 CCTCAGCGCGCGCTCGTCGTGT 578
DB 2 CCTCATCTCCGCTCCATCGTGT 25
RESULT 110
ABN15304
ID ABN15304 standard; DNA; 25 BP.
XX
XX AC ABN15304;
XX
XX 29-MAY-2002 (first entry)
XX
XX Human GDMPLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15296.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX Homo sapiens.
XX
XX WO200192524-A2.
XX
XX 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
```


CC The sequence represents a human mammary gland enriched chemokine (MEC)
CC PCR primer. The primer was used in the invention to amplify the coding
CC region of MECR. The invention relates to a novel method for regulating a
CC tumour or adverse bodily reaction, comprising providing a therapeutic
CC composition having a mammary gland chemokine polypeptide. The polypeptide
CC of the invention has cytostatic and antiinflammatory activity. The method
CC of the invention is useful for regulating a tumour or adverse bodily
CC reaction. The invention also provides a method useful for detecting a
CC tumour using a probe comprising the polynucleotide or an antibody to the
CC MEC. The adverse bodily reactions include cancer and inflammation
XX
SQ Sequence 27 BP; 5 A; 7 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 1.1%; Score 18.6; DB 1; Length 27;
Best Local Similarity 84.0%; Pred. No. 1.8e+02;
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 941 GCTGGCCTACTGCCACCGCAGAA 965
|||||||
Db 26 GCCTGGCCTACTGCCACTGACGCA 2

RESULT 104
ABT03768
ID ABT03768 standard; DNA; 27 BP.
XX AC ABT03768;
XX DT 13-SEP-2002 (first entry)
XX DE Human SHH gene PCR primer SEQ ID NO: 289.
XX DE Human; cancer; neoplastic disease; tumour specific marker; cytostatic;
XX KW transcription factor; PCR; primer; ss.
XX OS Homo sapiens.
XX PN WO200240716-A2.
XX PD 23-MAY-2002.
XX PF 13-NOV-2001; 2001WO-US043461.
XX PR 16-NOV-2000; 2000US-0249508P.
XX PA (CEMI-) CEMINES LLC.
XX PI Palm K;
XX WPI; 2002-537346/57.

PT Determining the presence of neoplastic molecular markers, by identifying
PT the presence of markers in host test sample using array of neoplastic
PT molecular marker specific reagents and analyzing the array of the
PT reagents.
XX Example 1; Page 19; 41pp; English.

XX The present invention relates to a method for determining the presence of
CC neoplastic molecular markers in a host, involving the use of neoplastic
CC molecular marker specific reagents to detect such markers and analysing
CC the array of reagents, allowing the identification of the neoplastic
CC disease present. This can be used to determine the best treatment for
CC cancers, in particular neural cell, lung and prostate tumours. The
CC present sequence is a PCR primer useful for detecting the coding
CC sequences of markers of the invention
XX
SQ Sequence 27 BP; 3 A; 11 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 18.2; DB 1; Length 27;
Best Local Similarity 87.0%; Pred. No. 2.1e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 921 CCTGTTCCAGTGCTCGTGCC 943
|||||||
Db 3 CCTGTTCCAGTGCTCGTGCC 25

RESULT 105
ADG47704
ID ADG47704 standard; DNA; 26 BP.
XX AC ADG47704;
XX DT 11-MAR-2004 (first entry)
XX DE AQP1 cDNA amplifying PCR primer #1.

XX KW Kidney; heart; liver; spleen; pancreas; bladder; ureter; urethra;
XX KW organ transplant; immunosuppressive; PCR; primer; ss.
XX OS Unidentified.
XX PN US2003180268-A1.
XX PD 25-SEP-2003.
XX PF 04-FEB-2003; 2003US-00358077.
XX PR 05-FEB-2002; 2002US-0355504P.
XX PR 15-MAR-2002; 2002US-0364863P.
XX PA (ATAL/) ATALA A.
XX PI Atala A;
XX WPI; 2003-802871/75.

XX New tissue-engineered construct comprising differentiated cells on a
XX three-dimensional biocompatible scaffold, and at least one physiological
XX function of the organ, useful for supplementing or replacing a damaged
XX organ.
XX Example; SEQ ID NO 9; 25pp; English.
XX The present invention provides methods and compositions for supplementing
CC or replacing a damaged organ such as kidney, heart, liver, spleen,
CC pancreas, bladder, ureter and urethra. The present sequence is AQP1 cDNA
CC amplifying PCR primer.

XX Sequence 26 BP; 8 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 1.0%; Score 18; DB 1; Length 26;
Best Local Similarity 80.8%; Pred. No. 2.2e+02;
Matches 21; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1287 CATCTGTCCAACGAGGAGTTCAAGA 1312
|||||||
Db 1 CAGCATGCCAGCGAGGAGTTCAAGA 26

RESULT 106
ADJ56756
ID ADJ56756 standard; DNA; 26 BP.
XX AC ADJ56756;
XX DT 06-MAY-2004 (first entry)
XX DE PCR primer 1 used to amplify AQP1 cDNA for tubule tissue.

XX KW PCR; primer; ss; histocompatible tissue; cell therapy;
XX KW nuclear transplantation cloning; matrix; therapeutic cloning;
XX KW regenerative therapy; transgenic; cancer; burn; heart disease; diabetes;
XX KW AIDS; liver; skin; corneal disease; spinal cord injury;
XX KW multiple sclerosis; reproductive; auditory dysfunction; cytostatic;

PT Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.

XX Example 2; Page 533; 718pp; English.

XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention

XX Sequence 25 BP; 7 A; 11 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 18.6; DB 1; Length 25;
Best Local Similarity 84.0%; Pred. No. 1.7e+02;
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 216 AGGCCTGGATGAGAGTGGTGGT 240
DB 25 AGGCAGGATGTAGTGGTGGT 1
|||||
|||||

RESULT 102
ACK02038/c

ID ACK02038 standard; DNA; 25 BP.

XX ACK02038;

XX 14-OCT-2003 (first entry)

XX Human microarray DNA oligonucleotide SEQ ID NO 102019.

XX EST; ss; probe; expressed sequence tag; microarray; gene expression;
XX genetic variation; biallelic marker; polymorphism; human;
XX cross-species comparison.

XX Homo sapiens.

XX US2003104410-A1.

XX 05-JUN-2003.

XX 15-MAR-2002; 2002US-00098263.

XX 16-MAR-2001; 2001US-0276759P.

XX (AFFY-) AFFYMETRIX INC.

XX Mittmann MP;

XX WPI; 2003-567953/53.

XX New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.

XX Claim 1; SEQ ID NO 102019; 9pp; English.

CC The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC nucleic acids further comprises a tag sequence. The array of nucleic acid
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html

XX Sequence 25 BP; 5 A; 8 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 18.6; DB 1; Length 25;
Best Local Similarity 84.0%; Pred. No. 1.7e+02;
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 391 TCGGATGAGGTGCAGTCTCCAGTGA 415
DB 25 TAGGATGAGGTGCACCTCAAGTGA 1
|||||
|||||

RESULT 103
ABA99028/c

ID ABA99028 standard; DNA; 27 BP.

XX ABA99028;

XX 20-MAY-2002 (first entry)

XX Human mammary gland enriched chemokine PCR primer #3.

XX Human; MEC; mammary gland enriched chemokine; chemokine; tumour; cancer;
XX cytostatic; antiinflammatory; inflammation; PCR; primer; ss.

XX Homo sapiens.

XX US2002009735-A1.

XX 24-JAN-2002.

XX 21-MAR-2001; 2001US-00813492.

XX 23-MAR-2000; 2000US-0191654P.

XX (LABO/) LABOW M A.

XX (MICK/) MICKANIN C S.

XX (BHAT/) BHATTIA U.

XX Labow MA, Mickanin CS, Bhatia U;

XX WPI; 2002-187776/24.

XX Regulating tumor or adverse bodily reaction, involves providing
PT therapeutic composition comprising a mammary gland chemokine, and
PT providing the composition to the tumor or to the area of adverse
PT reaction.

XX Disclosure; Page 5; 11pp; English.

CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-1
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
CC
XX
SQ Sequence 25 BP; 2 A; 12 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 18.6; DB 1; Length 25;
Best Local Similarity 84.0%; Pred. No. 1.7e+02;
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 555 CCTCAGCCGGCGCTCGTGTGTC 579

Db 1 CCTCATCTCCGGCTCCATCGTGTG 25

RESULT 100

ABV82335/c

ID ABV82335 standard; DNA; 25 BP.

XX AC ABV82335;

XX DT 03-JAN-2003 (first entry)

XX Human HTPL scanning oligonucleotide SEQ ID 3581.

XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
XX human testis expressed Patched like protein; testis; adrenal; liver;
XX male germ cell development; bone marrow; brain; kidney; lung; placenta;
XX prostate; skeletal muscle; colon; male infertility; cancer; ss.

XX OS Homo sapiens.

XX PN EP1229046-A2.

XX PD 07-AUG-2002.

XX PF 28-JAN-2002; 2002EP-00001167.

XX PR 30-JAN-2001; 2001WO-US0000663.

XX PR 30-JAN-2001; 2001WO-US0000664.

XX PR 30-JAN-2001; 2001WO-US0000665.

XX PR 30-JAN-2001; 2001WO-US0000667.

XX PR 30-JAN-2001; 2001WO-US0000668.

XX PR 23-MAY-2001; 2001US-00864761.

XX PR 09-OCT-2001; 2001US-0327898P.

XX PA (AEOM-) AEOMICA INC.

XX PI Zhan J;

XX WPI; 2002-676582/73.

XX Novel isolated human testis expressed Patched like protein (HTPL), useful
XX for identifying agonist and antagonist and specific binding partners, and
PT

for treating subjects having defects in HTPL.

XX Example 2; Page 533; 718pp; English.

XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV8759 to ABV8762 and ABV8519 to ABV8520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX

SQ Sequence 25 BP; 7 A; 12 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 18.6; DB 1; Length 25;

Best Local Similarity 84.0%; Pred. No. 1.7e+02;

Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 217 GGCTGGATGAGAGTGTGTGTG 241

Db 25 GGCCAGGATGTTAGTGATGTGTG 1

RESULT 101

ABV82336/c

ID ABV82336 standard; DNA; 25 BP.

XX AC ABV82336;

XX DT 03-JAN-2003 (first entry)

XX Human HTPL scanning oligonucleotide SEQ ID 3582.

XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
XX human testis expressed Patched like protein; testis; adrenal; liver;
XX male germ cell development; bone marrow; brain; kidney; lung; placenta;
XX prostate; skeletal muscle; colon; male infertility; cancer; ss.

XX OS Homo sapiens.

XX PN EP1229046-A2.

XX PD 07-AUG-2002.

XX PF 28-JAN-2002; 2002EP-00001167.

XX PR 30-JAN-2001; 2001WO-US0000663.

XX PR 30-JAN-2001; 2001WO-US0000664.

XX PR 30-JAN-2001; 2001WO-US0000665.

XX PR 30-JAN-2001; 2001WO-US0000667.

XX PR 30-JAN-2001; 2001WO-US0000668.

XX PR 23-MAY-2001; 2001WO-US0000669.

XX PR 09-OCT-2001; 2001US-00864761.

XX PR 09-OCT-2001; 2001US-0327898P.

XX PA (AEOM-) AEOMICA INC.

XX PI Zhan J;

XX WPI; 2002-676582/73.

XX (AFFY-) AFFYMETRIX INC.
 PA Mittmann MP;
 PI
 XX WPI; 2003-567953/53.
 DR
 XX New array of nucleic acid probes, useful for in situ hybridization, in
 PT Southern, Northern or dot-blot hybridization to identify or detect the
 PT sequence or specific mutations of any gene.
 XX
 PS Claim 1; SEQ ID NO 39568; 9pp; English.
 XX
 CC The invention discloses a microarray comprising a plurality of nucleic
 CC acid probes including one of 2,018,500 fully defined sequences, or its
 CC perfect match, perfect mismatch, antisense match or antisense mismatch.
 CC Also disclosed is a method of gene expression analysis. The array is used
 CC in monitoring gene expression levels by hybridisation to a DNA library,
 CC in analysis of genetic variation or in hybridisation of tag-labelled
 CC compounds. The nucleic acid probes are specifically designed for analysis
 CC of at least one target sequence. The method of analysis comprises
 CC hybridising at least one or more nucleic acids to at least two or more
 CC nucleic acid probes and detecting the hybridisation. The nucleic acid
 CC probes are attached to a solid support. The analysis comprises monitoring
 CC gene expression levels, identifying allelic markers or polymorphisms,
 CC or family members of a gene and a cross-species comparison. Each of the
 CC nucleic acids further comprises a tag sequence. The array of nucleic acid
 CC probes is useful in in situ hybridisation, in Southern, Northern or dot-
 CC blot hybridisation to identify or detect the sequence or specific
 CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
 CC primer extensions or in screening cDNA or genomic libraries or subclones
 CC for additional subclones containing segments of DNA that have been
 CC isolated and previously sequenced. The sequence presented is one of the
 CC nucleic acid probes incorporated in the microarray. Note: The sequence
 CC data for this patent can also be obtained in electronic format directly
 CC from USPTO at seqdata.uspto.gov/sequence.html
 XX
 SQ Sequence 25 BP; 7 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
 Query Match 1.1%; Score 18.8; DB 1; Length 25;
 Best Local Similarity 90.9%; Pred. No. 1.5e+02;
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 1256 TAGGAACCCCACTGAGGAGAC 1277
 DB 4 TAGGCATCTCCAACTGAGGAGAC 25
 RESULT 98
 ABT04565
 ID ABT04565 standard; DNA; 28 BP.
 XX
 AC ABT04565;
 XX
 DT 25-SEP-2002 (first entry)
 XX
 DE Human ALDH3 gene probe SEQ ID NO: 31.
 XX
 KW Human; drug metabolism; enzyme; probe; ss.
 XX
 OS Homo sapiens.
 PA
 PN JP2002142780-A.
 XX
 PD 21-MAY-2002.
 XX
 PF 28-AUG-2001; 2001JP-00257338.
 XX
 PR 04-SEP-2000; 2000JP-00267163.
 XX
 PA (SAKA) OTSUKA SEIYAKU KOGYO KK.
 XX
 DR WPI; 2002-552472/59.

XX Measurement of an enzyme participating to the first phase reaction of
 PT drug metabolism, a probe and a kit for it.
 XX
 PS Claim 4; Page 20; 36pp; Japanese.
 XX
 CC The present invention relates to probes which can be used for the
 CC measurement of an enzyme. The probes can be used for the measurement of
 CC an enzyme participating to the first phase reaction of drug metabolism.
 CC The present sequence is a probe shown in the invention
 XX
 SQ Sequence 28 BP; 7 A; 9 C; 6 G; 6 T; 0 U; 0 Other;
 Query Match 1.1%; Score 18.8; DB 1; Length 28;
 Best Local Similarity 90.9%; Pred. No. 1.7e+02;
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 845 AGTACCTGGACAGGACCTGAA 866
 DB 7 AGTACCTGGACAGGACTGTGA 28
 RESULT 99
 ABN15303
 ID ABN15303 standard; DNA; 25 BP.
 XX
 AC ABN15303;
 XX
 DT 29-MAY-2002 (first entry)
 XX
 DE Human GDMPLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15295.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; Gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 OS Homo sapiens.
 PN WO200192524-A2.
 XX
 PD 06-DEC-2001.
 XX
 PF 25-MAY-2001; 2001WO-US016981.
 XX
 PR 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 05-FEB-2001; 2001US-0266860P.
 XX
 PA (AEOM-) ABOMICA INC.
 XX
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX
 DR WPI; 2002-179446/23.
 XX
 PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 PS Disclosure; SEQ ID NO 15295; 214pp; English.
 XX
 CC The present invention describes a human genome-derived myosin-like

```
FT modified_base 1. .5 are 5-methylcytidines"
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15. .20
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004005567-A1.
FN
XX
XX 08-JAN-2004.
PD
XX
XX 02-JUL-2002; 2002US-00188779.
PF
XX
XX 02-JUL-2002; 2002US-00188779.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Dean NM, Freier SM, Dobie KW;
PI
XX
XX WPI; 2004-081710/08.
DR
XX
XX New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding cyclin-dependent kinase 4, useful for preparing a
PT composition for treating diabetes, infertility or hyperproliferative
PT disorder, e.g., cancer.
PT
XX
XX Example 15; SEQ ID NO 180; 90pp; English.
PS
XX
XX The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclin-
CC dependent kinase 4, specifically hybridises with the nucleic acid
CC encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-
CC dependent kinase 4. The antisense oligonucleotide is useful for preparing
CC a composition for treating diabetes, infertility or hyperproliferative
CC disorder, e.g., cancer. This sequence represents a human cyclin dependent
CC kinase 4 antisense oligonucleotide.
XX
XX Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1029 GGCTGACTTTGGCTGGCC 1047
Db 1 GGCTGACTTTGGCTGGCC 19
RESULT 96
ADI26843/c
ID ADI26843 standard; DNA; 20 BP.
XX
XX ADI26843;
AC
XX
XX 22-APR-2004 (first entry)
DT
XX
XX Cyclin dependent kinase 4 antisense oligonucleotide #9.
DE
XX
XX cytostatic; antidiabetic; antiinfertility; gene therapy;
KW cyclin-dependent kinase 4; diabetes; infertility;
KW hyperproliferative disorder; cancer; antisense technology; human; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1. .20
FT FT /*tag= b
FT FT /mod_base= OTHER
FT FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT
```

```
FT modified_base 1. .5
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15. .20
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004005567-A1.
FN
XX
XX 08-JAN-2004.
PD
XX
XX 02-JUL-2002; 2002US-00188779.
PF
XX
XX 02-JUL-2002; 2002US-00188779.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Dean NM, Freier SM, Dobie KW;
PI
XX
XX WPI; 2004-081710/08.
DR
XX
XX New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding cyclin-dependent kinase 4, useful for preparing a
PT composition for treating diabetes, infertility or hyperproliferative
PT disorder, e.g., cancer.
PT
XX
XX Example 15; SEQ ID NO 28; 90pp; English.
PS
XX
XX The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclin-
CC dependent kinase 4, specifically hybridises with the nucleic acid
CC encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-
CC dependent kinase 4. The antisense oligonucleotide is useful for preparing
CC a composition for treating diabetes, infertility or hyperproliferative
CC disorder, e.g., cancer. This sequence represents a human cyclin dependent
CC kinase 4 antisense oligonucleotide.
XX
XX Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1029 GGCTGACTTTGGCTGGCC 1047
Db 20 GGCTGACTTTGGCTGGCC 2
RESULT 97
ACI39577
ID ACI39577 standard; DNA; 25 BP.
XX
XX ACI39577;
AC
XX
XX 13-OCT-2003 (first entry)
DT
XX
XX Human microarray DNA oligonucleotide SEQ ID NO 39568.
DE
XX
XX EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
KW
XX
XX Homo sapiens.
OS
XX
XX US2003104410-A1.
FN
XX
XX 05-JUN-2003.
PD
XX
XX 15-MAR-2002; 2002US-00098263.
PF
XX
XX 16-MAR-2001; 2001US-0276759P.
PR
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XX 03-MAY-2001.
PD
XX
XX 26-OCT-2000; 2000WO-US029500.
PF
XX
XX 26-OCT-1999; 99US-0161532P.
PR
XX
XX (IMMU-) IMMUSOL INC.
PA
XX
XX Robbins JM, Tritz R;
PI
XX
XX WPI; 2001-300427/31.
DR
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 105; 408pp; English.
PS
XX
XX The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiposoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnery, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, reelinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
XX Sequence 19 BP; 1 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1028 TGGCTGACTTTGGCGCTGCG 1046
Db 1 TGGCTGACTTTGGCGCTGCG 19
RESULT 94
AAL61694
ID AAL61694 standard; DNA; 19 BP.
XX
XX AAL61694;
AC
XX
XX 22-SEP-2003 (first entry)
DT
XX
XX Human PCTAIRE protein kinase 1 DNA specific PCR probe.
DE
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; PCR; probe; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "FAM labelled"

```

```

FT modified_base 19
FT /*tag= b
FT /mod_base= OTHER
FT /note= "TAMRA labelled"
XX
XX WO2003049691-A2.
PN
XX
XX 19-JUN-2003.
PD
XX
XX 06-DEC-2002; 2002WO-US039138.
PF
XX
XX 07-DEC-2001; 2001US-00017621.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Freier SM, Roach MP;
PI
XX
XX WPI; 2003-577271/54.
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Example 13; Page 71; 104pp; English.
PS
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is human PCTAIRE
CC protein kinase 1 DNA specific PCR probe. This sequence is used to
CC illustrate the method of the invention
XX
XX Sequence 19 BP; 3 A; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 111 CCCGCCGATCGCCATGGAT 129
Db 1 CCCGCCGATCGCCATGGAT 19
RESULT 95
ADI26995
ID ADI26995 standard; DNA; 20 BP.
XX
XX ADI26995;
AC
XX
XX 22-APR-2004 (first entry)
DT
XX
XX Cyclin dependent kinase 4 antisense oligonucleotide #161.
DE
XX
XX cytostatic; antidiabetic; antiinfertility; gene therapy;
KW cyclin-dependent kinase 4; diabetes; infertility;
KW hyperproliferative disorder; cancer; antisense technology; human; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1. .20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines

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DE cdk4 ribozyme binding site #59.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
XX
XX WO200032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PCNA and Cyclin B1.
XX
XX Disclosure; Page 53; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX Representative examples of ribozyme recognition sites are given in
XX AAA82415 to AAA86787. The ribozyme of the invention is useful for
XX inhibiting restenosis by introduction of the ribozyme into cells. The
XX ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX
XX Sequence 19 BP; 1 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1028 TGGCTGACTTTGGCCTGGC 1046
XX |||||
XX Db 1 TGGCTGACTTTGGCCTGGC 19
XX
XX RESULT 92
XX AAH58041
XX ID AAH58041 standard; DNA; 19 BP.
XX
XX AC AAH58041;
XX
XX DT 10-SEP-2001 (first entry)
XX
XX DE Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:465.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnerary;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytotatic;
XX antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX antickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX
XX Homo sapiens.
XX OS Synthetic.
XX
XX PN WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 105; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulnerary, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX
XX Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1029 GGCTGACTTTGGCCTGGCC 1047
XX |||||
XX Db 1 GGCTGACTTTGGCCTGGCC 19
XX
XX RESULT 93
XX AAH58040
XX ID AAH58040 standard; DNA; 19 BP.
XX
XX AC AAH58040;
XX
XX DT 10-SEP-2001 (first entry)
XX
XX DE Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:464.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnerary;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytotatic;
XX antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX antickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX
XX Homo sapiens.
XX OS Synthetic.
XX
XX PN WO200130362-A2.
XX
XX
XX

```


CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying allelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC nucleic acids further comprises a tag sequence. The array of nucleic acid
CC probes is useful in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
XX
SQ Sequence 25 BP; 4 A; 8 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 19.2; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 1.3e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 686 ACAACCTGTGGCACTCAAGGAGA 709
DB 25 ACAACCTGTGGCACTGGAGGAGA 2
|||||

RESULT 89
AAZ29517
ID AAZ29517 standard; DNA; 29 BP.
XX
AC AAZ29517;
XX
DT 14-MAR-2000 (first entry)
XX
DE Primer-2 for identification of SA responsive element in AOPRT-L promoter.
XX
KW Inducible promoter; Thaumatin-like PR-5 related gene; AOPRT-L; primer;
KW non-phytoxic inducing agent; Salicylic acid; SA; BTH; environmental;
KW developmental; GUS construct; multimerisation; SA responsive element;
KW systemic activation; Inverse PCR; IPCR; ss.
XX
OS Synthetic.
OS
FN WO9966057-A2.
FN
PD 23-DEC-1999.
XX
FF 21-JUN-1999; 99WO-GB001949.
XX
PR 19-JUN-1998; 98GB-00013345.
XX
PA (BIOG-) BIOGEMMA UK LTD.
XX
PI Draper J, Kenton P, Paul W;
XX
DR WPI; 2000-106107/09.
XX
PT Novel promoters used to control the expression of heterologous genes in
PT transformed plants.
XX
PS Example 12; Page 40; 67pp; English.
XX
CC The present DNA sequence is a PCR primer-2, used for the identification
CC and multimerisation of a salicylic acid, SA/BTH responsive element in the
CC AOPRT-L promoter region. This primer is designed to regions of AOPRT-L
CC promoter and used along with PCR primer-4 for the construction of GUS
CC fusion constructs
XX

SQ Sequence 29 BP; 10 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 1.1%; Score 19.2; DB 1; Length 29;
Best Local Similarity 87.5%; Pred. No. 1.5e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 596 GCTTTGGAACTGGAGACCTACA 619
DB 6 GCTTTGGAACTGAATACCTACA 29
|||||

RESULT 90
AAA82879
ID AAA82879 standard; DNA; 19 BP.
XX
AC AAA82879;
XX
DT 04-DEC-2000 (first entry)
XX
DE cdk4 ribozyme binding site #60.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS Mammalia.
XX
FN WO200032765-A2.
XX
PD 08-JUN-2000.
XX
PF 06-DEC-1999; 99WO-US028772.
XX
PR 04-DEC-1998; 98US-0110954P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch PJ, Barber JR, Robbins JW;
XX
DR WPI; 2000-412314/35.
XX
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
PS Disclosure; Page 53; 109pp; English.
XX
CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
SQ Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1029 GGCTGACTTTGGCCTGGCC 1047
DB 1 GGCTGACTTTGGCCTGGCC 19
|||||

RESULT 91
AAA82878
ID AAA82878 standard; DNA; 19 BP.
XX
AC AAA82878;
XX
DT 04-DEC-2000 (first entry)
XX

coupled to an exogenous promoter; is at least 30 contiguous bases of a sequence of 2556 bp, fully defined in the specification and is attached to a solid support; is the 2556bp polynucleotide or its modified form; or is a sequence of 2367 bp, fully defined in the specification; a recombinant cell comprising the recombinant nucleic acid, where the cell comprises an RNA polymerase recognised by the promoter; a recombinant cell made by introducing into a murine cellular genome a recombinant nucleic acid encoding at least 20 contiguous amino acids of the 851 amino acid protein; a purified antibody preparation comprising an antibody that selectively binds to the polypeptide over the human disrupted-in-schizophrenia 1 polypeptide; a recombinant mouse comprising an alteration in an allele encoding a polypeptide, where the alteration substantially reduces or increases full length expression of the polypeptide from the allele; and a method for screening for a compound able to bind to a Discl polypeptide by contacting the Discl polypeptide with the compound; and measuring the ability of the compound to bind to the Discl polypeptide. The disrupted-in-schizophrenia 1 protein has neuroleptic, nootropic, and neuroprotective activities. The Discl 1 polynucleotide can be used in gene therapy to treat disorders. The polypeptides are useful for treating schizophrenia, major mental illnesses, schizoaffective disorders, bipolar disorders or unipolar disorders. This polynucleotide sequence represents a splice donor site of the disrupted-in-schizophrenia 1 (Disc 1) gene of the invention.

XX SQ Sequence 24 BP; 4 A; 14 C; 4 G; 2 T; 0 U; 0 Other;
Query Match 1.1%; Score 19.8; DB 1; Length 24;
Best Local Similarity 91.3%; Pred. No. 94;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCGGCGAGTGAC 252
|||||
DB 24 GTGGTGGTGGCGGCGGCGAC 2

RESULT 87
ACI51216/c
ID ACI51216 standard; DNA; 25 BP.
XX ACI51216;
AC ACI51216;
XX 13-OCT-2003 (first entry)
XX Human microarray DNA oligonucleotide SEQ ID NO 51207.
DE EST; ss; probe; expressed sequence tag; microarray; gene expression;
XX genetic variation; biallelic marker; polymorphism; human;
XX cross-species comparison.
XX Homo sapiens.
XX US2003104410-A1.
PN 05-JUN-2003.
XX 15-MAR-2002; 2002US-00098263.
XX 16-MAR-2001; 2001US-0276759P.
XX (AFFY-) AFFYMETRIX INC.
XX Mittmann MP;
XX WPI; 2003-567953/53.
XX New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
XX Claim 1; SEQ ID NO 51207; 9pp; English.
XX The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its

perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in situ hybridisation, in Southern, Northern or dot-blot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at seqdata.uspto.gov/sequence.html

XX SQ Sequence 25 BP; 5 A; 8 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 19.2; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 1.3e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 686 ACAACCTTGTGGCACTCAAGGAGA 709
|||||
DB 25 ACAACCTTGTGGTACTGGAGGAGA 2

RESULT 88
ACI51217/c
ID ACI51217 standard; DNA; 25 BP.
XX ACI51217;
AC ACI51217;
XX 13-OCT-2003 (first entry)
XX Human microarray DNA oligonucleotide SEQ ID NO 51208.
DE EST; ss; probe; expressed sequence tag; microarray; gene expression;
XX genetic variation; biallelic marker; polymorphism; human;
XX cross-species comparison.
XX Homo sapiens.
XX US2003104410-A1.
PN 05-JUN-2003.
XX 15-MAR-2002; 2002US-00098263.
XX 16-MAR-2001; 2001US-0276759P.
XX (AFFY-) AFFYMETRIX INC.
XX Mittmann MP;
XX WPI; 2003-567953/53.
XX New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
XX Claim 1; SEQ ID NO 51208; 9pp; English.
XX The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used

recombinant cell comprising the recombinant nucleic acid, where the cell comprises an RNA polymerase recognised by the promoter; a recombinant cell made by introducing into a murine cellular genome a recombinant nucleic acid encoding at least 20 contiguous amino acids of the 851 amino acid protein; a purified antibody preparation comprising an antibody that selectively binds to the polypeptide over the human disrupted-in-schizophrenia 1 polypeptide; a recombinant mouse comprising an alteration in an allele encoding a polypeptide, where the alteration substantially reduces or increases full length expression of the polypeptide from the allele; and a method for screening for a compound able to bind to a Disc1 polypeptide by contacting the Disc1 polypeptide with the compound; and measuring the ability of the compound to bind to the Disc1 polypeptide. The disrupted-in-schizophrenia 1 protein has neuroleptic, nootropic, and neuroprotective activities. The Disc 1 polynucleotide can be used in gene therapy to treat disorders. The polypeptides are useful for treating schizophrenia, major mental illnesses, schizoaffective disorders, bipolar disorders or unipolar disorders. This polynucleotide sequence represents a splice acceptor site of the disrupted-in-schizophrenia 1 (Disc 1) gene of the invention.

Sequence 24 BP; 4 A; 14 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 1.1%; Score 19.8; DB 1; Length 24;

Best Local Similarity 91.3%; Pred. No. 94;

Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 230 GTGGTGGTGGCGCGCAGTGAC 252
|||||

Db 24 GTGGTGGTGGCGCGGGCGAC 2
|||||

RESULT 06

ID ADK17453/c

ADK17453 standard; DNA; 24 BP.

AC ADK17453;

XX

XX 06-MAY-2004 (first entry)

XX Disrupted-in-schizophrenia 1 (Disc 1) splice donor site of exon 9.

XX disrupted-in-schizophrenia 1; Disc 1; RNA polymerase; neuroleptic; nootropic; neuroprotective; gene therapy; schizophrenia;

KW major mental illness; schizoaffective disorder; bipolar disorder;

KW unipolar; ss.

XX

XX Unidentified.

XX

XX WO2003099995-A2.

XX

XX 04-DEC-2003.

XX

XX 20-MAY-2003; 2003WO-US015741.

XX

XX 24-MAY-2002; 2002US-0383191P.

PR

XX (MERI) MERCK & CO INC.

PA

XX

XX Morris JA, Ma L, Liu Y;

XX

XX WPI; 2004-035115/03.

XX

XX New Disc1 polypeptides, useful for treating schizophrenia, major mental illnesses, schizoaffective disorders, bipolar disorders or unipolar disorders.

FT

XX

XX Disclosure; SEQ ID NO 34; 57pp; English.

PS

XX

XX The invention relates to a novel purified disrupted-in-schizophrenia 1 (Disc 1) polypeptide comprising at least 8 contiguous amino acids of a sequence of 851 amino acids, fully defined in the specification. The invention further relates to: a recombinant nucleic acid comprising a sequence that either encodes the polypeptide and is transcriptionally

```
Query Match      1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 269 CAGTGCTGCTCTCTGGGAA 288
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Db 20 CAGTGCTGCTCTCTGGGAA 1

RESULT 83
AAL61738/c
ID AAL61738 standard; DNA; 20 BP.
XX
AC AAL61738;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204175.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
PI WPI; 2003-577271/54.
XX
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
FT gene expression, particularly useful for treating hyperproliferative or
FT neurological disorders for example, mental retardation, or
FT thrombocytopenia.
XX
PS Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
```

```
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 693 TGTGGCACTCAAGGAGATCA 712
    |||||
Db 20 TGTGGCACTCAAGGAGATCA 1

RESULT 84
AAL61743/c
ID AAL61743 standard; DNA; 20 BP.
XX
AC AAL61743;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204180.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
PI WPI; 2003-577271/54.
XX
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
FT gene expression, particularly useful for treating hyperproliferative or
FT neurological disorders for example, mental retardation, or
FT thrombocytopaenia.
XX
PS Claim 3; Page 74; 104pp; English.
XX
```

```
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone; All cytidines are 5-
XX methylcytidines"
XX modified_base 1..5
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XX /mod_base= OTHER
XX /note= "2'methoxyethyl nucleotides"
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 72;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1715 GCCTGAGCCATGTTACCTG 1734
XX ||||||||||||||||
XX Db 20 GCCTGAGCCATGTTACCTG 1
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RESULT 82
AAL61713/c
ID AAL61713 standard; DNA; 20 BP.
XX
XX AAL61713;
AC
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204150.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopaenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
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XX methylcytidines"
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XX /mod_base= OTHER
XX /note= "2'methoxyethyl nucleotides"
XX modified_base 16..20
XX /tag= c
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XX /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
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FT      /*tag= b
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FT      /note= "2'methoxyethyl nucleotides"
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FT      /note= "2'methoxyethyl nucleotides"

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WO2003049691-A2.

19-JUN-2003.

06-DEC-2002; 2002WO-US039138.

07-DEC-2001; 2001US-00017621.

(ISIS-) ISIS PHARM INC.

Freier SM, Roach MP;

WPI; 2003-577271/54.

New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.

Claim 3; Page 74; 104pp; English.

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention

Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 72;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 331 GTGCACGAGGACTTGAAGAT 350

Db 20 GTGCACGAGGACTTGAAGAT 1

RESULT 80

AAL61769/c

ID AAL61769 standard; DNA; 20 BP.

XX AAL61769;

XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204206.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

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FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-

FT methylcytidines"

FT modified_base 1..5

FT /*tag= b

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.

PN 19-JUN-2003.

PD 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

PA Freier SM, Roach MP;

XX WPI; 2003-577271/54.

New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.

XX Claim 3; Page 75; 104pp; English.

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 72;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1563 GATGCTGACTCAGGCAGGC 1582

Db 20 GATGCTGACTCAGGCAGGC 1

RESULT 81

AAL61774/c

ID AAL61774 standard; DNA; 20 BP.

XX AAL61774;

XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204211.

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PI Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 2 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 169 CGAGTGCCCGAGGCATAGA 188
DB 20 CGAGTGCCCGAGGCATAGA 1
RESULT 78
AAL61716/c
ID AAL61716 standard; DNA; 20 BP.
XX
XX AAL61716;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204153.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
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FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
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FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.

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XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 5 C; 9 G; 3 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 299 CACGGGGCCCACTCAGCTCT 318
DB 20 CACGGGGCCCACTCAGCTCT 1
RESULT 79
AAL61719/c
ID AAL61719 standard; DNA; 20 BP.
XX
XX AAL61719;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204156.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
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FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5

```

CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 4 A; 1 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1480 ATCCACAACTTCTGACAC 1499
Db 20 ATCCACAACTTCTGACAC 1

RESULT 76
AAL61703/c
ID AAL61703 standard; DNA; 20 BP.
XX
AC AAL61703;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204140.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
DR WPI; 2003-577271/54.
XX
PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopaenia.
XX

PS Example 15; Page 73; 104pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 56 TGTGACTGCTGAAACCCAGG 75
Db 20 TGTGACTGCTGAAACCCAGG 1

RESULT 77
AAL61711/c
ID AAL61711 standard; DNA; 20 BP.
XX
AC AAL61711;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204148.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
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FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX

RESULT 74
AAL61744/c
ID AAL61744 standard; DNA; 20 BP.
XX AC AAL61744;
XX DT 22-SEP-2003 (first entry)
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204181.
XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
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XX PN WO2003049691-A2.
XX PD 19-JUN-2003.
XX PF 06-DEC-2002; 2002WO-US039138.
XX PR 07-DEC-2001; 2001US-00017621.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX Claim 3; Page 74; 104pp; English.
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
SQ Sequence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

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RESULT 75
AAL61762/c
ID AAL61762 standard; DNA; 20 BP.
XX AC AAL61762;
XX DT 22-SEP-2003 (first entry)
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204199.
XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1..20
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XX PN WO2003049691-A2.
XX PD 19-JUN-2003.
XX PF 06-DEC-2002; 2002WO-US039138.
XX PR 07-DEC-2001; 2001US-00017621.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX Claim 3; Page 75; 104pp; English.
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia

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OS Homo sapiens.
OS Synthetic.
XX
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FH Key Location/Qualifiers
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XX WO2003049691-A2.
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PD 19-JUN-2003.
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PF 06-DEC-2002; 2002WO-US039138.
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PR 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX
PI Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
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XX |||||
XX Db 20 GACCAGGCTTCAGCCAGTC 1
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XX RESULT 73
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XX AC AAL61725;
XX
XX XX 22-SEP-2003 (first entry)
XX DT
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DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204162.
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XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
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XX Synthetic.
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XX methylcytidines"
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XX modified_base 16..20
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XX WO2003049691-A2.
XX
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XX 19-JUN-2003.
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XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
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PN WO2003049691-A2.
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PD 19-JUN-2003.
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XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
PI
XX WPI; 2003-577271/54.
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
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XX 22-SEP-2003 (first entry)
DT
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DE
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XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
OS
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FT methylcytidines"

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XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
PI
XX WPI; 2003-577271/54.
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 5 C; 9 G; 3 T; 0 U; 0 Other;
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DB 20 GGGCCCACTCAGCTCTGCAC 1

RESULT 72
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ID AAL61722 standard; DNA; 20 BP.
XX
XX AAL61722;
AC
XX 22-SEP-2003 (first entry)
DT
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204159.
DE
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX

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```
XX
PS Claim 3; Page 74; 104pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
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    DT 22-SEP-2003 (first entry)
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    KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
    KW hyperproliferative disease; neurological disease; thrombocytopaenia;
    KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
    KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
    KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
    KW antisense; ss.
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    OS Synthetic.
    XX
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    XX
    PD 19-JUN-2003.
    XX
    PE 06-DEC-2002; 2002WO-US039138.
    XX
    PR 07-DEC-2001; 2001US-00017621.
    XX
    PA (ISIS-) ISIS PHARM INC.
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XX
PI Freier SM, Roach MP;
XX
DR WPI; 2003-577271/54.
XX
FT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
FT gene expression, particularly useful for treating hyperproliferative or
FT neurological disorders for example, mental retardation, or
FT thrombocytopaenia.
XX
PS Claim 3; Page 75; 104pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
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    AC AAL61708;
    XX
    DT 22-SEP-2003 (first entry)
    XX
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    XX
    KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
    KW hyperproliferative disease; neurological disease; thrombocytopaenia;
    KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
    KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
    KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
    KW antisense; ss.
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    OS Synthetic.
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Db 20 CTGCTGAGGCTACCTGGA 1

RESULT 67
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AC AAL61751;
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DT 22-SEP-2003 (first entry)
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KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
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OS Synthetic.
XX
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FT methylcytidines"
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XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
WPI; 2003-577271/54.
XX
New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
thrombocytopaenia.
XX
Claim 3; Page 74; 104pp; English.
XX
The invention relates to antisense compounds, compositions and methods
for modulating the expression of PCTAIRE protein kinase 1 (also known as
PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
treating an animal having a disease or condition associated with PCTAIRE
protein kinase 1, particularly a hyperproliferative disease or a
neurological disease. These diseases include thrombocytopaenia, mental
```

```
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
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Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 20 AGGCATCTGTCCACGAGG 1

RESULT 68
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ID AAL61752 standard; DNA; 20 BP.
XX
AC AAL61752;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204189.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
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OS Synthetic.
XX
FH Key Location/Qualifiers
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PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
WPI; 2003-577271/54.
XX
New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
thrombocytopaenia.
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XX DE
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XX KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX KW antisense; ss.
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XX OS Synthetic.
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XX PD 19-JUN-2003.
XX XX
XX PF 06-DEC-2002; 2002WO-US039138.
XX XX
XX PR 07-DEC-2001; 2001US-00017621.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Freier SM, Roach MP;
XX XX
XX DR WPI; 2003-577271/54.
XX XX
XX CC The invention relates to antisense compounds, compositions and methods
XX CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX CC treating an animal having a disease or condition associated with PCTAIRE
XX CC protein kinase 1, particularly a hyperproliferative disease or a
XX CC neurological disease. These diseases include thrombocytopaenia, mental
XX CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX CC particularly useful for inhibiting the expression of PCTAIRE protein
XX CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX CC or as research reagents or kits. The present sequence is an antisense
XX CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX CC sequence is used to illustrate the method of the invention
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ID AAL61731 standard; DNA; 20 BP.
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XX AC AAL61731;
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XX DT 22-SEP-2003 (first entry)
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XX
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XX KW hyperproliferative disease; neurological disease; thrombocytopaenia;
XX KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX KW antisense; ss.
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XX OS Synthetic.
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XX PN WO2003049691-A2.
XX PN
XX PD 19-JUN-2003.
XX XX
XX PF 06-DEC-2002; 2002WO-US039138.
XX XX
XX PR 07-DEC-2001; 2001US-00017621.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Freier SM, Roach MP;
XX XX
XX DR WPI; 2003-577271/54.
XX XX
XX CC New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX CC gene expression, particularly useful for treating hyperproliferative or
XX CC neurological disorders for example, mental retardation, or
XX CC thrombocytopaenia.
XX XX
XX PS Claim 3; Page 74; 104pp; English.
XX XX
XX CC The invention relates to antisense compounds, compositions and methods
XX CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX CC treating an animal having a disease or condition associated with PCTAIRE
XX CC protein kinase 1, particularly a hyperproliferative disease or a
XX CC neurological disease. These diseases include thrombocytopaenia, mental
XX CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX CC particularly useful for inhibiting the expression of PCTAIRE protein
XX CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX CC or as research reagents or kits. The present sequence is an antisense
XX CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX CC sequence is used to illustrate the method of the invention
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FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX 19-JUN-2003.
XX 06-DEC-2002; 2002WO-US039138.
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
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XX thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
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XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
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XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
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XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
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XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1121 TGCTTGGGTCACGGACTAC 1140
Db 20 TGCTTGGGTCACGGACTAC 1
RESULT 64
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ID AAL61763 standard; DNA; 20 BP.
XX
XX AAL61763;
AC
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204200.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
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FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX 19-JUN-2003.
XX 06-DEC-2002; 2002WO-US039138.
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
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XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
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XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
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XX Best Local Similarity 100.0%; Pred.No. 72;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 20 TTCTGTGACACTTCCATA 1
RESULT 65
AAL61730/c
ID AAL61730 standard; DNA; 20 BP.
XX
XX AAL61730;
AC
XX
DT 22-SEP-2003 (first entry)
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CC neurological disease. These diseases include thrombocytopaenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 SQ Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 72;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 14 AAGGATGACAGGAATGCAG 33
 Db 20 AAGGATGACAGGAATGCAG 1
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RESULT 60
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 ID AAL61709 standard; DNA; 20 BP.
 XX
 AC AAL61709;
 XX
 DT 22-SEP-2003 (first entry)
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 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204146.
 XX
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.
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 OS Synthetic.
 XX
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 FT methylethyldines"
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 FT modified_base 16..20
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 FT /note= "2'methoxyethyl nucleotides"
 XX
 PN WO2003049691-A2.
 XX
 PD 19-JUN-2003.
 XX
 PF 06-DEC-2002; 2002WO-US039138.
 XX
 PR 07-DEC-2001; 2001US-00017621.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Freier SM, Roach MP;
 XX
 DR WPI; 2003-577271/54.
 XX
 PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
 PT gene expression, particularly useful for treating hyperproliferative or
 PT neurological disorders for example, mental retardation, or

PT thrombocytopaenia.
 XX
 PS Claim 3; Page 74; 104pp; English.
 XX
 CC The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopaenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

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 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 149 GGCAGCTGTCATGACACTC 168
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RESULT 61
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 ID AAL61721 standard; DNA; 20 BP.
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 AC AAL61721;
 XX
 DT 22-SEP-2003 (first entry)
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 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204158.
 XX
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.
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 OS Homo sapiens.
 OS Synthetic.
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 FT modified_base 1..20
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 PD 19-JUN-2003.
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 PF 06-DEC-2002; 2002WO-US039138.
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AC      AAL61698;
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XX      Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW      hyperproliferative disease; neurological disease; thrombocytopenia;
KW      retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW      mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW      PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW      antisense; ss.
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OS      Synthetic.
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FT      methylcytidines"
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XX
XX      WO2003049691-A2.
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XX      19-JUN-2003.
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XX      06-DEC-2002; 2002WO-US039138.
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XX      07-DEC-2001; 2001US-00017621.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Freier SM, Roach MP;
XX
XX      WPI; 2003-577271/54.
XX
XX      New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX      gene expression, particularly useful for treating hyperproliferative or
XX      neurological disorders for example, mental retardation, or
XX      thrombocytopenia.
XX
XX      Example 15; Page 73; 104pp; English.
XX
XX      The invention relates to antisense compounds, compositions and methods
XX      for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX      PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX      treating an animal having a disease or condition associated with PCTAIRE
XX      protein kinase 1, particularly a hyperproliferative disease or a
XX      neurological disease. These diseases include thrombocytopenia, mental
XX      retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX      with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX      disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX      particularly useful for inhibiting the expression of PCTAIRE protein
XX      kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX      or as research reagents or kits. The present sequence is an antisense
XX      oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX      sequence is used to illustrate the method of the invention
XX
XX      Query Match      1..1%; Score 20; DB 1; Length 20;
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XX      AC      AAL61699;
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XX      XX      22-SEP-2003 (first entry)
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XX      XX      Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX      KW      hyperproliferative disease; neurological disease; thrombocytopenia;
XX      KW      retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX      KW      mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX      KW      PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX      KW      antisense; ss.
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XX      XX      WO2003049691-A2.
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XX
XX      XX      (ISIS-) ISIS PHARM INC.
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XX      XX      Freier SM, Roach MP;
XX
XX      XX      WPI; 2003-577271/54.
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XX      neurological disease. These diseases include thrombocytopenia, mental
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XX      particularly useful for inhibiting the expression of PCTAIRE protein
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XX      or as research reagents or kits. The present sequence is an antisense
XX      oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX      sequence is used to illustrate the method of the invention
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KW antisense; ss.
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XX Homo sapiens.
XX Synthetic.
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XX WO2003049691-A2.
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XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
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XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
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XX thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
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XX sequence is used to illustrate the method of the invention
XX
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DT 22-SEP-2003 (first entry)
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XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
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XX Homo sapiens.
XX Synthetic.
XX
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XX 19-JUN-2003.
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XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
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XX (ISIS-) ISIS PHARM INC.
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XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
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XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
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XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
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XX
XX Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 72;
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PN WO2003049691-A2.
XX
XX 19-JUN-2003.
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PD 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
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FT neurological disorders for example, mental retardation, or
FT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 1207 TTTCCGGGCTCCACGGTGA 1226
Db 20 TTTCCGGGCTCCACGGTGA 1
RESULT 55
AAL61761/c
ID AAL61761 standard; DNA; 20 BP.
XX
XX AAL61761;
AC
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204198.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
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FT /mod_base= OTHER
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FT methylecytidines"
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XX /*tag= b
XX /mod_base= OTHER
XX /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
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XX /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
CC gene expression, particularly useful for treating hyperproliferative or
CC neurological disorders for example, mental retardation, or
CC thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 1476 GCGGATCCACAACTTCCTG 1495
Db 20 GCGGATCCACAACTTCCTG 1
RESULT 56
AAL61710/c
ID AAL61710 standard; DNA; 20 BP.
XX
XX AAL61710;
AC
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204147.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
```

PT neurological disorders for example, mental retardation, or
 XX thrombocytopenia.

PS Claim 3; Page 74; 104pp; English.

CC The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 SQ Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 72;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 181 GGCATAGACACCAATGG 200
 |||||
 Db 20 GGCATAGACACCAATGG 1

RESULT 53
 AAL61736/c
 ID AAL61736 standard; DNA; 20 BP.
 XX
 AC AAL61736;
 XX
 DT 22-SEP-2003 (first entry)
 XX
 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204173.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.

XX Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-

FT methylcytidines"

FT modified_base 1..5

FT /*tag= b

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.

PN 19-JUN-2003.

PD 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

PR

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach WP;

XX WPI; 2003-577271/54.

DR
 XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
 CC gene expression, particularly useful for treating hyperproliferative or
 CC neurological disorders for example, mental retardation, or
 CC thrombocytopenia.

XX Example 15; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX

SQ Sequence 20 BP; 4 A; 3 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 72;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 614 CCTACATTAAAGCTGCACAAA 633

|||||
 Db 20 CCTACATTAAAGCTGCACAAA 1

RESULT 54

AAL61747/c

ID AAL61747 standard; DNA; 20 BP.

XX

AC AAL61747;

XX

DT 22-SEP-2003 (first entry)

XX

DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204184.

XX

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-

FT methylcytidines"

FT modified_base 1..5

FT /*tag= b

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 72;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 48 ACCAGCAGTGTGACTGCTGA 67

DB 20 ACCAGCAGTGTGACTGCTGA 1

RESULT 51

AAL61705/C

ID AAL61705 standard; DNA; 20 BP.

XX AAL61705;

XX AAL61705;

DT 22-SEP-2003 (first entry)

DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204142.

XX

KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.

XX

OS Homo sapiens.

OS Synthetic.

XX

FH Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-

FT methylcytidines"

FT modified_base 1..5

FT /*tag= b

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE

CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 3 A; 6 C; 2 G; 9 T; 0 U; 0 Other;

SQ Sequence 20 BP; 3 A; 6 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 72;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 127 GATCGGATGAAGAGATCAA 146

DB 20 GATCGGATGAAGAGATCAA 1

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XX

XX 22-SEP-2003 (first entry)
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204203.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX
XX Key Location/Qualifiers
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FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
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FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 6 A; 5 C; 8 G; 1 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 1543 GCCAGCCTTCGGTCTTCGTC 1562

Db 20 GCCAGCCTTCGGTCTTCGTC 1
RESULT 50
AAL61702/c
ID AAL61702 standard; DNA; 20 BP.
XX
XX AAL61702;
XX 22-SEP-2003 (first entry)
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204139.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
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FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
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FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Example 15; Page 73; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This

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FT      /mod_base= OTHER
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FT      methycytidines"
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FT      1. .5
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "2'methoxyethyl nucleotides"
FT      modified_base
FT      16. .20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "2'methoxyethyl nucleotides"
XX      WO2003049691-A2.
XX      19-JUN-2003.
XX      06-DEC-2002; 2002WO-US039138.
XX      07-DEC-2001; 2001US-00017621.
XX      (ISIS-) ISIS PHARM INC.
XX      Freier SM, Roach MP;
XX      WPI; 2003-577271/54.
XX      New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX      gene expression, particularly useful for treating hyperproliferative or
XX      neurological disorders for example, mental retardation, or
XX      thrombocytopenia.
XX      Claim 3; Page 74; 104pp; English.
XX      The invention relates to antisense compounds, compositions and methods
XX      for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX      PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX      treating an animal having a disease or condition associated with PCTAIRE
XX      protein kinase 1, particularly a hyperproliferative disease or a
XX      neurological disease. These diseases include thrombocytopenia, mental
XX      retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX      with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX      disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX      particularly useful for inhibiting the expression of PCTAIRE protein
XX      kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX      or as research reagents or kits. The present sequence is an antisense
XX      oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX      sequence is used to illustrate the method of the invention
XX      Sequence 20 BP; 5 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
XX      Query Match      1.1%; Score 20; DB 1; Length 20;
XX      Best Local Similarity 100.0%; Pred. No. 72;
XX      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX      566 GCCTCCGTCGTCGTCAGCCTA 585
XX      |||||
XX      20 GCCTCCGTCGTCGTCAGCCTA 1
XX      Db

RESULT 48
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ID      AAL61739 standard; DNA; 20 BP.
XX      AAL61739;
XX      22-SEP-2003 (first entry)
XX      Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204176.
XX      Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX      hyperproliferative disease; neurological disease; thrombocytopenia;
XX      retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX      mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;

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KW      PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW      antisense; ss.
XX      Homo sapiens.
XX      Synthetic.
XX      Key      Location/Qualifiers
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XX      /*tag= a
XX      /mod_base= OTHER
XX      /note= "Phosphorothioate backbone; All cytidines are 5-
XX      methycytidines"
XX      modified_base      1. .5
XX      /*tag= b
XX      /mod_base= OTHER
XX      /note= "2'methoxyethyl nucleotides"
XX      modified_base      16. .20
XX      /*tag= c
XX      /mod_base= OTHER
XX      /note= "2'methoxyethyl nucleotides"
XX      WO2003049691-A2.
XX      19-JUN-2003.
XX      06-DEC-2002; 2002WO-US039138.
XX      07-DEC-2001; 2001US-00017621.
XX      (ISIS-) ISIS PHARM INC.
XX      Freier SM, Roach MP;
XX      WPI; 2003-577271/54.
XX      New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX      gene expression, particularly useful for treating hyperproliferative or
XX      neurological disorders for example, mental retardation, or
XX      thrombocytopenia.
XX      Claim 3; Page 74; 104pp; English.
XX      The invention relates to antisense compounds, compositions and methods
XX      for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX      PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX      treating an animal having a disease or condition associated with PCTAIRE
XX      protein kinase 1, particularly a hyperproliferative disease or a
XX      neurological disease. These diseases include thrombocytopenia, mental
XX      retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX      with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX      disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX      particularly useful for inhibiting the expression of PCTAIRE protein
XX      kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX      or as research reagents or kits. The present sequence is an antisense
XX      oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX      sequence is used to illustrate the method of the invention
XX      Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;
XX      Query Match      1.1%; Score 20; DB 1; Length 20;
XX      Best Local Similarity 100.0%; Pred. No. 72;
XX      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX      764 TGCTCAAGGACCTCAACAC 783
XX      |||||
XX      20 TGCTCAAGGACCTCAACAC 1
XX      Db

RESULT 49
AAL61766/c
ID      AAL61766 standard; DNA; 20 BP.
XX      AAL61766;

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PR 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
PA Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 388 TCCTCGGATGAGTGCAGTC 407
Db 20 TCCTCGGATGAGTGCAGTC 1
RESULT 46
AAL61733/c
ID AAL61733 standard; DNA; 20 BP.
XX
XX AAL61733;
XX
XX 22-SEP-2003 (first entry)
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XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204170.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "2'methoxyethyl nucleotides"
XX modified_base 16..20
XX /tag= c

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FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 519 GAAGCTGACCTCAATAGCC 538
Db 20 GAAGCTGACCTCAATAGCC 1
RESULT 47
AAL61734/c
ID AAL61734 standard; DNA; 20 BP.
XX
XX AAL61734;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204171.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a

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New antisense oligonucleotides for modulating PCTAIRE protein kinase 1

XX

QY 481 CTACCAAGCTGACATCCGGCT 500
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Db 20 CTACCAAGCTGACATCCGGCT 1

RESULT 42

AAL61755/c
ID AAL61755 standard; DNA; 20 BP.

XX AAL61755;

DT 22-SEP-2003 (first entry)

DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204192.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.

OS Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FH modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-

FT methylcytidines"

FT modified_base 1..5

FT /*tag= b

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

PN WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1

XX gene expression, particularly useful for treating hyperproliferative or

XX neurological disorders for example, mental retardation, or

XX thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods

XX for modulating the expression of PCTAIRE protein kinase 1 (also known as

XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for

XX treating an animal having a disease or condition associated with PCTAIRE

XX protein kinase 1, particularly a hyperproliferative disease or a

XX neurological disease. These diseases include thrombocytopaenia, mental

XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia

XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth

XX disease, or incontinentia pigmenti. The antisense oligonucleotide is

XX particularly useful for inhibiting the expression of PCTAIRE protein

XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,

XX or as research reagents or kits. The present sequence is an antisense

CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This

CC sequence is used to illustrate the method of the invention

XX SQ Sequence 20 BP; 6 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 72;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1402 TTGCAGTTTGAGGTCGAAA 1421

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Db 20 TTGCAGTTTGAGGTCGAAA 1

RESULT 43

AAL61748/c

ID AAL61748 standard; DNA; 20 BP.

XX AAL61748;

DT 22-SEP-2003 (first entry)

DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204185.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.

OS Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FH modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-

FT methylcytidines"

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FT /note= "2'methoxyethyl nucleotides"

FT modified_base 16..20

FT /*tag= c

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FT /note= "2'methoxyethyl nucleotides"

PN WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1

XX gene expression, particularly useful for treating hyperproliferative or

XX neurological disorders for example, mental retardation, or

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XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods

XX for modulating the expression of PCTAIRE protein kinase 1 (also known as

XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for

```

KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
OS Homo sapiens.
XX Synthetic.
XX
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FT modified_base 1..20 /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5 /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20 /tag= c
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FT /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
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XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Preier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
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XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
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XX Claim 3; Page 74; 104pp; English.
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XX The invention relates to antisense compounds, compositions and methods
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XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
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XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 72;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 406 TCTCCAGTGAGAGTGCCTAT 425
DB 20 TCTCCAGTGAGAGTGCCTAT 1
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RESULT 41
AAL61729/c
ID AAL61729 standard; DNA; 20 BP.
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AC AAL61729;
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XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204166.
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XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
XX Synthetic.
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XX Key Location/Qualifiers
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XX methylcytidines"
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XX /note= "2'methoxyethyl nucleotides"
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XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Preier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
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XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 72;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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FT FT /note= "2'methoxyethyl nucleotides"
PN W02003049691-A2.
XX
XX 19-JUN-2003.
PD
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
EA
XX
XX Freier SM, Roach MP;
PI
XX WPI; 2003-577271/54.
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
FT gene expression, particularly useful for treating hyperproliferative or
FT neurological disorders for example, mental retardation, or
FT thrombocytopenia.
PS
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 117 GATGCCCATGATCGGATGA 136
Db |||||||||||||||||||
20 GATGCCCATGATCGGATGA 1
RESULT 39
AAL61707/c
ID AAL61707 standard; DNA; 20 BP.
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XX AAL61707;
AC
XX 22-SEP-2003 (first entry)
DT
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204144.
DE
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1. .20
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FT FT /mod_base= OTHER
FT FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
PN W02003049691-A2.
XX
XX 19-JUN-2003.
PD
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
EA
XX
XX Freier SM, Roach MP;
PI
XX WPI; 2003-577271/54.
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
FT gene expression, particularly useful for treating hyperproliferative or
FT neurological disorders for example, mental retardation, or
FT thrombocytopenia.
PS
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 138 GAAGATCAACACGCGAGTGT 157
Db |||||||||||||||||||
20 GAAGATCAACACGCGAGTGT 1
RESULT 40
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ID AAL61724 standard; DNA; 20 BP.
XX
XX AAL61724;
AC
XX 22-SEP-2003 (first entry)
DT
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204161.
DE
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;

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PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX
PS Claim 3; Page 75; 104pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
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CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
XX
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XX Best Local Similarity 100.0%; Pred. No. 72;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
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DB 20 AGTCTGGGGAGCGGATCCA 1
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XX RESULT 37
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XX ID AAL61771 standard; DNA; 20 BP.
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XX AC AAL61771;
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XX DT 22-SEP-2003 (first entry)
XX
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204208.
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XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
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XX OS Homo sapiens.
XX OS Synthetic.
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XX PH Key Location/Qualifiers
XX FT modified_base 1..20
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XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.

XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
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XX
XX Claim 3; Page 75; 104pp; English.
XX
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CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 72;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
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DB 20 TGGACACCGAGTCTTAAGCC 1
XX
XX
XX RESULT 38
XX AAL61704/c
XX ID AAL61704 standard; DNA; 20 BP.
XX
XX AC AAL61704;
XX
XX DT 22-SEP-2003 (first entry)
XX
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204141.
XX
XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX OS Homo sapiens.
XX OS Synthetic.
XX
XX PH Key Location/Qualifiers
XX FT modified_base 1..20
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XX FT methylcytidines"
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XX FT /mod_base= OTHER
XX FT /note= "2'methoxyethyl nucleotides"
XX FT modified_base 16..20

CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 SQ Sequence 20 BP; 7 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
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 Best Local Similarity 100.0%; Pred. No. 72;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 DB 20 GTTACGCTACATGACATTAT 1
 RESULT 35
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 ID AAL61741 standard; DNA; 20 BP.
 XX
 AC AAL61741;
 XX
 DT 22-SEP-2003 (first entry)
 XX
 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204178.
 XX
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.
 XX
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 OS Synthetic.
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 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 FT modified_base 16..20
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 PN WO2003049691-A2.
 XX
 PD 19-JUN-2003.
 XX
 PF 06-DEC-2002; 2002WO-US039138.
 XX
 PR 07-DEC-2001; 2001US-00017621.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Freier SM, Roach MP;
 XX
 DR WPI; 2003-577271/54.
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 XX
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 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
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 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 SQ Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 U; 0 Other;
 Query Match 1.1%; Score 20; DB 1; Length 20;
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 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 814 CACACGGAGAGTCCCTCAC 833
 DB 20 CACACGGAGAGTCCCTCAC 1
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 AAL61760/c
 ID AAL61760 standard; DNA; 20 BP.
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 AC AAL61760;
 XX
 DT 22-SEP-2003 (first entry)
 XX
 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204197.
 XX
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
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 PN WO2003049691-A2.
 XX
 PD 19-JUN-2003.
 XX
 PF 06-DEC-2002; 2002WO-US039138.
 XX
 PR 07-DEC-2001; 2001US-00017621.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Freier SM, Roach MP;
 XX
 DR WPI; 2003-577271/54.
 XX

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XX AC AAL61726;
XX DT 22-SEP-2003 (first entry)
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204163.
XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX OS Homo sapiens.
XX Synthetic.
XX FH Key Location/Qualifiers
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FT /note= "2'methoxyethyl nucleotides"
XX PN WO2003049691-A2.
XX PD 19-JUN-2003.
XX PF 06-DEC-2002; 2002WO-US039138.
XX PR 07-DEC-2001; 2001US-00017621.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Roach MP;
XX PS WPI; 2003-577271/54.
XX CC The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX SQ Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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OY 445 AAGATCTCCACTGAGGACAT 464
DB 20 AAGATCTCCACTGAGGACAT 1
RESULT 34
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ID AAL61740 standard; DNA; 20 BP.
XX AAL61740;
XX AC AAL61740;
XX DT 22-SEP-2003 (first entry)
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204177.
XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX OS Homo sapiens.
XX Synthetic.
XX FH Key Location/Qualifiers
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FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
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XX PN WO2003049691-A2.
XX PD 19-JUN-2003.
XX PF 06-DEC-2002; 2002WO-US039138.
XX PR 07-DEC-2001; 2001US-00017621.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Roach MP;
XX PS WPI; 2003-577271/54.
XX CC New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX PS Claim 3; Page 74; 104pp; English.
XX CC The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,

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FT modified_base 1..20
FT /tag= a
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FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
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XX WO2003049691-A2.
XX PN
XX PD
XX PP
XX 19-JUN-2003.
XX 06-DEC-2002; 2002WO-US039138.
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Roach MP;
XX WI; 2003-577271/54.
XX DR
XX PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX PS Claim 3; Page 75; 104pp; English.
XX CC The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX SQ Sequence 20 BP; 3 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
XX Query Match 1..18; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 72;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1436 AGGATGCCATGAACATCCA 1455
DB 20 AGGATGCCATGAACATCCA 1
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RESULT 32
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ID AAL61764 standard; DNA; 20 BP.
XX AC AAL61764;
XX XX
XX 22-SEP-2003 (first entry)
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204201.
XX DE
XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;

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KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
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XX methylcytidines"
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XX modified_base 16..20
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XX /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX PN
XX PD
XX PP
XX 19-JUN-2003.
XX 06-DEC-2002; 2002WO-US039138.
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX PI Freier SM, Roach MP;
XX WI; 2003-577271/54.
XX DR
XX PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX PS Claim 3; Page 75; 104pp; English.
XX CC The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX SQ Sequence 20 BP; 5 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
XX Query Match 1..18; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 72;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 20 CATATTGGCACTAAAGGAGA 1
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RESULT 33
AAL61726/c
ID AAL61726 standard; DNA; 20 BP.

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PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
PS
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
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Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 20 AGGGTACTCTGGAGAGCTG 1
RESULT 30
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ID AAL61745 standard; DNA; 20 BP.
XX
XX AAL61745;
AC
XX
XX 22-SEP-2003 (first entry)
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204182.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
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FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
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FT modified_base 16..20
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XX
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
PI
XX WPI; 2003-577271/54.
DR
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
PS
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
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Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1114 GACATCTGCTGGTCCAC 1133
DB 20 GACATCTGCTGGTCCAC 1
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ID AAL61757 standard; DNA; 20 BP.
XX
XX AAL61757;
AC
XX
XX 22-SEP-2003 (first entry)
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204194.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
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FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
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CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopaenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, mental
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 SQ Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 72;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1582 CCAGCTTTCGCGTGGTGA 1601
 Db 20 CCAGCTTTCGCGTGGTGA 1
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 ID AAL61715 standard; DNA; 20 BP.
 XX
 AC AAL61715;
 XX
 DT 22-SEP-2003 (first entry)
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 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204152.
 XX
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.
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 OS Synthetic.
 XX
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 WO2003049691-A2.
 19-JUN-2003.
 06-DEC-2002; 2002WO-US039138.
 07-DEC-2001; 2001US-00017621.
 (ISIS-) ISIS PHARM INC.
 Freier SM, Roach MP;
 WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
 PT gene expression, particularly useful for treating hyperproliferative or
 PT neurological disorders for example, mental retardation, or
 PT thrombocytopaenia.
 XX
 PS Claim 3; Page 74; 104pp; English.
 XX
 CC The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopaenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is an antisense
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 1.1%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 72;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 281 CTGGGGAACCTCGTTCGCA 300
 Db 20 CTGGGGAACCTCGTTCGCA 1
 RESULT 29
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 ID AAL61732 standard; DNA; 20 BP.
 XX
 AC AAL61732;
 XX
 DT 22-SEP-2003 (first entry)
 XX
 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204169.
 XX
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
 KW antisense; ss.
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 OS Homo sapiens.
 OS Synthetic.
 XX
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 /note= "2'methoxyethyl nucleotides"
 methylcytidines"
 WO2003049691-A2.
 19-JUN-2003.

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1391 TCACCAAGCTGTTCAGTTT 1410
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Db 20 TCACCAAGCTGTTCAGTTT 1

RESULT 26
AAL61758/c
ID AAL61758 standard; DNA; 20 BP.
XX
AC AAL61758;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204195.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20 /*tag= a
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FT modified_base 1..5
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FT /note= "2'methoxyethyl nucleotides"
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FN WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein

CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 7 A; 1 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1449 ACATCCATTCTTCCTCAGTC 1468
|||||
Db 20 ACATCCATTCTTCCTCAGTC 1

RESULT 27
AAL61770/c
ID AAL61770 standard; DNA; 20 BP.
XX
AC AAL61770;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204207.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20 /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20 /*tag= c
FT /mod_base= OTHER
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XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods

hyperproliferative disease; neurological disease; thrombocytopaenia;
retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
antisense; ss.
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WO2003049691-A2.
19-JUN-2003.
06-DEC-2002; 2002WO-US039138.
07-DEC-2001; 2001US-00017621.
(ISIS-) ISIS PHARM INC.
Freier SM, Roach MP;
WPI; 2003-577271/54.
New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
thrombocytopenia.
Claim 3; Page 74; 104pp; English.
The invention relates to antisense compounds, compositions and methods
for modulating the expression of PCTAIRE protein kinase 1 (also known as
PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for
treating an animal having a disease or condition associated with PCTAIRE
protein kinase 1, particularly a hyperproliferative disease or a
neurological disease. These diseases include thrombocytopaenia, mental
retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
disease, or incontinentia pigmenti. The antisense oligonucleotide is
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kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
or as research reagents or kits. The present sequence is an antisense
oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
sequence is used to illustrate the method of the invention
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DT 22-SEP-2003 (first entry)
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hyperproliferative disease; neurological disease; thrombocytopaenia;
retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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PF 06-DEC-2002; 2002WO-US039138.
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PR 07-DEC-2001; 2001US-00017621.
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PA (ISIS-) ISIS PHARM INC.
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PI Freier SM, Roach MP;
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WPI; 2003-577271/54.
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neurological disease. These diseases include thrombocytopaenia, mental
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kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
or as research reagents or kits. The present sequence is an antisense
oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
sequence is used to illustrate the method of the invention
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Best Local Similarity 100.0%; Pred. No. 72;
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XX 07-DEC-2001; 2001US-00017621.
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XX (ISIS-) ISIS PHARM INC.
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XX Freier SM, Roach MP;
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XX WPI; 2003-577271/54.
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XX Claim 3; Page 75; 104pp; English.
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XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
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XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
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XX 22-SEP-2003 (first entry)
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XX mental retardation; Wiskott-Aldrich syndrome; dystonia; parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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XX Homo sapiens.
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XX Synthetic.
XX
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WO2003049691-A2.
19-JUN-2003.
06-DEC-2002; 2002WO-US039138.
07-DEC-2001; 2001US-00017621.
(ISIS-) ISIS PHARM INC.
Freier SM, Roach MP;
WPI; 2003-577271/54.
New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
thrombocytopenia.
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neurological disease. These diseases include thrombocytopenia, mental
retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
disease, or incontinentia pigmenti. The antisense oligonucleotide is
particularly useful for inhibiting the expression of PCTAIRE protein
kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
or as research reagents or kits. The present sequence is an antisense
oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
sequence is used to illustrate the method of the invention
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XX 22-SEP-2003 (first entry)
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XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
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DR WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, x-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
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XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
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XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
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XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
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XX The invention relates to antisense compounds, compositions and methods
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CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
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CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
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XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
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CC	The invention relates to antisense compounds, compositions and methods
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CC	PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for
CC	treating an animal having a disease or condition associated with PCTAIRE
CC	protein kinase 1, particularly a hyperproliferative disease or a
CC	neurological disease. These diseases include thrombocytopaenia, mental
CC	retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC	with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC	disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC	particularly useful for inhibiting the expression of PCTAIRE protein
CC	kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC	or as research reagents or kits. The present sequence is an antisense
CC	oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC	sequence is used to illustrate the method of the invention
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KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;	
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;	
KW PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;	
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PA (ISIS-) ISIS PHARM INC.	
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P1 Freier SM, Roach MP;	


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AC AAL61737;
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DT 22-SEP-2003 (first entry)
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KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
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KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
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PR 07-DEC-2001; 2001US-00017621.
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PA (ISIS-) ISIS PHARM INC.
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PI Freier SM, Roach MP;
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PD MPI; 2003-577271/54.
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CC sequence is used to illustrate the method of the invention
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DT 22-SEP-2003 (first entry)
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XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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PI Freier SM, Roach MP;
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PD MPI; 2003-577271/54.
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CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
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XX WO2003049691-A2.
XX PN 19-JUN-2003.
XX PD 06-DEC-2002; 2002WO-US039138.
XX PF 07-DEC-2001; 2001US-00017621.
XX PR (ISIS-) ISIS PHARM INC.
XX PA Freier SM, Roach MP;
XX PI WPI; 2003-577271/54.
XX DR New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.
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XX SQ Sequence 20 BP; 2 A; 7 C; 2 G; 9 T; 0 U; 0 Other;
Query Match 1..1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone; antisense; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
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FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
FT 1..5
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FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT 16..20
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FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX WO2003049691-A2.
XX PN 19-JUN-2003.
XX PD 06-DEC-2002; 2002WO-US039138.
XX PF 07-DEC-2001; 2001US-00017621.
XX PR (ISIS-) ISIS PHARM INC.
XX PA Freier SM, Roach MP;
XX PI WPI; 2003-577271/54.
XX DR New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.
XX PS Claim 3; Page 74; 104pp; English.
XX CC The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
XX SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 1..1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 455 CTGAGGACATCAACACGCG 474
DB 20 CTGAGGACATCAACACGCG 1
RESULT 17

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PD 19-JUN-2003.
XX
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
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XX Best Local Similarity 100.0%; Pred. No. 72;
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XX Db 20 ACCGAGTCTTAAGCCACAGA 1
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XX RESULT 14
XX AAL61773/c
XX ID AAL61773 standard; DNA; 20 BP.
XX
XX AC AAL61773;
XX
XX XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204210.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
XX OS Synthetic.
XX
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XX /note= "Phosphorothioate backbone; All cytidines are 5-
XX methylcytidines"
XX modified_base 1..5
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FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
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FT /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 72;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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XX
XX Db 20 AGCGGCTGGAGGATGCCAC 1
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XX RESULT 15
XX AAL61706/c
XX ID AAL61706 standard; DNA; 20 BP.
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XX AC AAL61706;
XX
XX XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204143.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
XX OS Synthetic.

```

```
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1457 TCTTCTCAGTCTGGGGGAG 1476
Db 20 TCTTCTCAGTCTGGGGGAG 1
RESULT 12
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ID AAL61767 standard; DNA; 20 BP.
XX
AC AAL61767;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204204.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
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FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
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```
XX WPI; 2003-577271/54.
XX
PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopaenia.
XX
PS Claim 3; Page 75; 104pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 20 GTCTTCGTCGATCGCTGACT 1
RESULT 13
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ID AAL61772 standard; DNA; 20 BP.
XX
AC AAL61772;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204209.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
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FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
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FT /note= "2'methoxyethyl nucleotides"
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PN WO2003049691-A2.
XX
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DB 20 ACGAGGACTTGAAGTGGG 1

RESULT 10
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AC AAL61749;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204186.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.

OS Homo sapiens.
OS Synthetic.
XX
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XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.

PS Claim 3; Page 74; 104pp; English.

CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth

CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention

XX SQ Sequence 20 BP; 7 A; 2 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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XX
AC AAL61759;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204196.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.

OS Homo sapiens.
OS Synthetic.

XX
XX Key Location/Qualifiers
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FT /*tag= a
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FT methylecytidines"
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FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
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XX WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.

PS Claim 3; Page 75; 104pp; English.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylecytidines"
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XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
SQ
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Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 273 TGCTGCTCCTGGGGAACATTC 292
|||||
DB 20 TGCTGCTCCTGGGGAACATTC 1

RESULT 9
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ID AAL61720 standard; DNA; 20 BP.
XX
XX AAL61720;
AC
XX 22-SEP-2003 (first entry)
DT
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204157.
XX
XX DE
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylecytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
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FT /note= "2'methoxyethyl nucleotides"
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FT
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 9 C; 2 G; 6 T; 0 U; 0 Other;
SQ

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XX OS Homo sapiens.
XX OS Unidentified.
XX FH Key Location/Qualifiers
XX FT variation 11
XX FT /*tag= a
XX FT /standard_name= "single nucleotide polymorphism"
XX PN WO200138576-A2.
XX PD 31-MAY-2001.
XX XX 17-NOV-2000; 2000WO-US031639.
XX PR 24-NOV-1999; 99US-0167334P.
XX PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX FI Cargill M, Ireland JS, Lander ES;
XX DR WPI; 2001-367705/38.
XX PT New nucleic acid segments of the human genome, particularly from genes
XX PT including polymorphic sites, for phenotype correlation, forensics,
XX PT paternity testing, medicine and genetic analysis.
XX PS Claim 1; Page 37; 80pp; English.
XX CC DNA sequences AAH62100 - AAH62688 represent segments of human genes which
XX CC contain single nucleotide polymorphisms (SNPs). A method is included in
XX CC the invention for analysing a nucleic acid sample, which consists of
XX CC determining the base occupying any one of the polymorphic sites given in
XX CC the SNP containing sequences. The nucleotide sequences can be used in the
XX CC diagnosis or monitoring of diseases, such as cancer, inflammation, heart
XX CC diseases, diseases of the cardiovascular system, and infection by
XX CC microorganisms. The oligonucleotides are also useful in the manufacture
XX CC of a medicament for the treatment or prophylaxis of the diseases, and as
XX CC a pharmaceutical. SNP containing oligonucleotides are useful in
XX CC applications such as phenotype correlation, forensics, paternity testing,
XX CC medicine and genetic analysis
XX CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
XX SQ Sequence 21 BP; 9 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
XX Query Match 1.2%; Score 21; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 49;
XX Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 702 CAAGGAGATCAGACTGGACA 722
DB 1 CAAGGAGATCAGACTGGACA 21
RESULT 7
AAL61700/c
ID AAL61700 standard; DNA; 20 BP.
XX AC AAL61700;
XX DT 22-SEP-2003 (first entry)
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204137.
XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX KW hyperproliferative disease; neurological disease; thrombocytopaenia;
XX KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX KW antisense; ss.
XX OS Homo sapiens.

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OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone; All cytidines are 5-
XX FT methylcytidines"
XX FT modified_base 1..5
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "2'methoxyethyl nucleotides"
XX FT modified_base 16..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'methoxyethyl nucleotides"
XX PN WO2003049691-A2.
XX PD 19-JUN-2003.
XX XX 06-DEC-2002; 2002WO-US039138.
XX PF 07-DEC-2001; 2001US-00017621.
XX PR (ISIS-) ISIS PHARM INC.
XX PA Freier SM, Roach MP;
XX FI WPI; 2003-577271/54.
XX DR
XX XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX PT gene expression, particularly useful for treating hyperproliferative or
XX PT neurological disorders for example, mental retardation, or
XX PT thrombocytopaenia.
XX XX Example 15; Page 73; 104pp; English.
XX PS The invention relates to antisense compounds, compositions and methods
XX CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX CC treating an animal having a disease or condition associated with PCTAIRE
XX CC protein kinase 1, particularly a hyperproliferative disease or a
XX CC neurological disease. These diseases include thrombocytopaenia, mental
XX CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX CC particularly useful for inhibiting the expression of PCTAIRE protein
XX CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX CC or as research reagents or kits. The present sequence is an antisense
XX CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX CC sequence is used to illustrate the method of the invention
XX SQ Sequence 20 BP; 2 A; 9 C; 2 G; 7 T; 0 U; 0 Other;
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 72;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 27 AATGCAGAGTAGGCAGGAG 46
DB 20 AATGCAGAGTAGGCAGGAG 1
RESULT 8
AAL61714/c
ID AAL61714 standard; DNA; 20 BP.
XX AC AAL61714;
XX DT 22-SEP-2003 (first entry)
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204151.

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```
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 136 AAGAAGATCAAAACGGCGCTCT 157
Db 22 AAGAAGATCAAAACGGCGCTCT 1

RESULT 4
AAI30264
ID AAI30264 standard; DNA; 31 BP.
XX
AC AAI30264;
XX
DT 18-OCT-2001 (first entry)
XX
DE Human single nucleotide polymorphism (SNP) 97.
XX
KW Human; resequencing; genotype; disease; forensic; paternity testing;
KW single nucleotide polymorphism; SNP; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(16,T)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
PN WO200166800-A2.
XX
PD 13-SEP-2001.
XX
PF 07-MAR-2001; 2001WO-US007268.
XX
PR 07-MAR-2000; 2000US-0187510P.
XX
PR 07-MAR-2000; 2000US-0187510P.
XX
PR 22-MAY-2000; 2000US-0206129P.
XX
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI Cargill M, Ireland JS, Lander ES;
XX
DR WPI; 2001-522952/57.
XX
PT Nucleic acid molecules from the human genome which include polymorphic
PT sites, useful in methods for predicting the presence, absence or severity
PT of a particular phenotype or disorder (e.g. diabetes) associated with a
PT particular genotype.
XX
PS Claim 1; Page 75; 145pp; English.
XX
CC The invention relates to the identification of nucleic acid molecules
CC (AAI29513-AAI31314) from the human genome which include polymorphic sites
CC which can predispose individuals to disease. Various genes from a number
CC of individuals were resequenced and single nucleotide polymorphisms
CC (SNPs) in these genes discovered. The method is useful for predicting the
CC presence, absence or severity of a particular phenotype or disorder (e.g.
CC diabetes) associated with a particular genotype. The nucleic acids
CC containing the polymorphic sites may be useful in forensics and paternity
CC testing
XX
SQ Sequence 31 BP; 8 A; 11 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 1.3%; Score 22; DB 1; Length 31;
Best Local Similarity 83.3%; Pred. No. 46;
Matches 25; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 979 GACCTCAGCCCAACCTGCTCATCAAC 1008
Db 2 GACATCAAGCCCAACCTGCTGTCGAC 31

RESULT 5
AAI29606
ID AAI29606 standard; DNA; 31 BP.
```

```
XX AAI29606;
XX
AC 18-OCT-2001 (first entry)
XX
DE Human single nucleotide polymorphism (SNP) PCTAIRE3 1.
XX
KW Human; resequencing; genotype; disease; forensic; paternity testing;
KW single nucleotide polymorphism; SNP; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(16,C)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
PN WO200166800-A2.
XX
PD 13-SEP-2001.
XX
PF 07-MAR-2001; 2001WO-US007268.
XX
PR 07-MAR-2000; 2000US-0187510P.
PR 22-MAY-2000; 2000US-0206129P.
XX
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI Cargill M, Ireland JS, Lander ES;
XX
DR WPI; 2001-522952/57.
XX
PT Nucleic acid molecules from the human genome which include polymorphic
PT sites, useful in methods for predicting the presence, absence or severity
PT of a particular phenotype or disorder (e.g. diabetes) associated with a
PT particular genotype.
XX
PS Claim 1; Page 34; 145pp; English.
XX
CC The invention relates to the identification of nucleic acid molecules
CC (AAI29513-AAI31314) from the human genome which include polymorphic sites
CC which can predispose individuals to disease. Various genes from a number
CC of individuals were resequenced and single nucleotide polymorphisms
CC (SNPs) in these genes discovered. The method is useful for predicting the
CC presence, absence or severity of a particular phenotype or disorder (e.g.
CC diabetes) associated with a particular genotype. The nucleic acids
CC containing the polymorphic sites may be useful in forensics and paternity
CC testing
XX
SQ Sequence 31 BP; 6 A; 9 C; 8 G; 8 T; 0 U; 0 Other;

Query Match 1.2%; Score 21.4; DB 1; Length 31;
Best Local Similarity 80.6%; Pred. No. 60;
Matches 25; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 577 GTCAGCCTATCTGAGATTGCTTTGGAAAC 607
Db 1 GCCTCCCTGTCAGACATGCTTTGGAAAC 31

RESULT 6
AAH62195
ID AAH62195 standard; DNA; 21 BP.
XX
AC AAH62195;
XX
DT 09-SEP-2004 (revised)
DT 12-SEP-2001 (first entry)
XX
DE PCTAIRE-1 polymorphism containing DNA fragment #96.
XX
KW Single nucleotide polymorphism; SNP; human; cancer; inflammation;
KW heart disease; paternity testing; forensic science; ds.
```


PT Medicinal compositions for the treatment of dementia and Alzheimer's
 XX disease, comprise compounds that suppress beta amyloid production.
 PS Example 6; Page 23; 62pp; Japanese.
 XX
 CC The present invention describes medicinal compositions (I) inhibiting
 CC beta-amyloid production comprising an active component a substance that
 CC inhibits the activity of cyclin-dependent kinase (CDK). Also described
 CC are: (1) a method for screening compounds for their ability to inhibit
 CC the production of beta-amyloid by contacting with beta-amyloid producing
 CC cells; and (2) screening kits. (I) have neurotropic and neuroprotective
 CC activities. (I) suppress the phosphorylation of amyloid precursor protein
 CC (APP) which is an essential step in the production of beta-amyloid. (I)
 CC can be used in the treatment and prevention of neurodegenerative diseases
 CC such as dementia and Alzheimer's disease. The present sequence represents
 CC a PCR primer which is used in the exemplification of the present
 CC invention
 XX
 SQ Sequence 33 BP; 6 A; 6 C; 11 G; 10 T; 0 U; 0 Other;
 Query Match 1.3%; Score 22.4; DB 1; Length 33;
 Best Local Similarity 81.2%; Pred. No. 41;
 Matches 26; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
 QY 1018 GAGCTCAGCTGGCTGACTTTGGCTGGCCCG 1049
 Db 2 GAGCTGAATTGGCTAATTGGCTGGCTGGCTCG 33
 RESULT 2
 ABA04106/c
 ID ABA04100 standard; DNA; 33 BP.
 XX
 AC ABA04100;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Human Cdk5 related PCR primer SEQ ID NO:19.
 XX
 KW Human; beta-amyloid; cyclin-dependent kinase inhibitor; nerve cell;
 KW amyloid precursor protein; APP; Cdk5; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200182967-A1.
 XX
 PD 08-NOV-2001.
 XX
 PF 25-APR-2001; 2001WO-JP003555.
 XX
 PR 28-APR-2000; 2000JP-00131037.
 XX
 PA (YAMA) YAMANOUCHI PHARM CO LTD.
 PA (SUZU) SUZUKI T.
 XX
 PI Suzuki T, Watanabe T, Kawabata S, Hachiya S;
 XX
 DR WPI; 2002-026209/03.
 XX
 PT Medicinal compositions for the treatment of dementia and Alzheimer's
 PT disease, comprise compounds that suppress beta amyloid production.
 XX
 PS Example 6; Page 23; 62pp; Japanese.
 XX
 CC The present invention describes medicinal compositions (I) inhibiting
 CC beta-amyloid production comprising an active component a substance that
 CC inhibits the activity of cyclin-dependent kinase (CDK). Also described
 CC are: (1) a method for screening compounds for their ability to inhibit
 CC the production of beta-amyloid by contacting with beta-amyloid producing
 CC cells; and (2) screening kits. (I) have neurotropic and neuroprotective
 CC activities. (I) suppress the phosphorylation of amyloid precursor protein
 CC (APP) which is an essential step in the production of beta-amyloid. (I)
 CC can be used in the treatment and prevention of neurodegenerative diseases

CC such as dementia and Alzheimer's disease. The present sequence represents
 CC a PCR primer which is used in the exemplification of the present
 CC invention
 XX
 SQ Sequence 33 BP; 10 A; 11 C; 6 G; 6 T; 0 U; 0 Other;
 Query Match 1.3%; Score 22.4; DB 1; Length 33;
 Best Local Similarity 81.2%; Pred. No. 41;
 Matches 26; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
 QY 1018 GAGCTCAGCTGGCTGACTTTGGCTGGCCCG 1049
 Db 32 GAGCTGAATTGGCTAATTGGCTGGCTGGCTCG 1
 RESULT 3
 AAL61693/c
 ID AAL61693 standard; DNA; 22 BP.
 XX
 AC AAL61693;
 XX
 DT 22-SEP-2003 (first entry)
 XX
 DE Human PCTAIRE protein kinase 1 DNA specific reverse PCR primer.
 XX
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
 KW hyperproliferative disease; neurological disease; thrombocytopenia;
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
 KW PTCK1; crk5; incontinentia pigmenti; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2003049691-A2.
 XX
 PD 19-JUN-2003.
 XX
 PF 06-DEC-2002; 2002WO-US039138.
 XX
 PR 07-DEC-2001; 2001US-00017621.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Freier SM, Roach MP;
 XX
 DR WPI; 2003-577271/54.
 XX
 PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
 PT gene expression, particularly useful for treating hyperproliferative or
 PT neurological disorders for example, mental retardation, or
 XX thrombocytopenia.
 PS Example 13; Page 71; 104pp; English.
 XX
 CC The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
 CC PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for
 CC treating an animal having a disease or condition associated with PCTAIRE
 CC protein kinase 1, particularly a hyperproliferative disease or a
 CC neurological disease. These diseases include thrombocytopenia, mental
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
 CC particularly useful for inhibiting the expression of PCTAIRE protein
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
 CC or as research reagents or kits. The present sequence is human PCTAIRE
 CC protein kinase 1 DNA specific PCR primer. This sequence is used to
 CC illustrate the method of the invention
 XX
 SQ Sequence 22 BP; 3 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
 Query Match 1.3%; Score 22; DB 1; Length 22;
 Best Local Similarity 100.0%; Pred. No. 33;

2297	13.4	0.8	20	1	AAA40720	Mouse multidrug re	2370	13.4	0.8	20	1	ADH54805	Human VEGF-C targe
2298	13.4	0.8	20	1	AAZ72882	Human biallelic ma	2371	13.4	0.8	20	1	ADH54751	Human VEGF-C anti
2299	13.4	0.8	20	1	AAZ79748	Hepatitis B virus	2372	13.4	0.8	20	1	ADH45152	Human beta-site AP
2300	13.4	0.8	20	1	AAA38236	Human angiotensin-	2373	13.4	0.8	20	1	ADH45075	Human beta-site AP
2301	13.4	0.8	20	1	AAAC61236	Human ACE, Agr and	2374	13.4	0.8	20	1	ADI28277	Human PRL3 antisen
2302	13.4	0.8	20	1	AAA95391	Rat FGFR coding se	2375	13.4	0.8	20	1	ADI28141	Antisense oligonuc
2303	13.4	0.8	20	1	AAAG6189	Dog genomic marker	2376	13.4	0.8	20	1	ADJ85574	Nucleic acid anal
2304	13.4	0.8	20	1	AAAG6813	Dog genomic marker	2377	13.4	0.8	20	1	ADJ86243	Nucleic acid anal
2305	13.4	0.8	20	1	AAAG79540	Murine p38beta ant	2378	13.4	0.8	20	1	ADK96899	Antisense 2'-MOE g
2306	13.4	0.8	20	1	AAAF5056	PCR primer used to	2379	13.4	0.8	20	1	ADK43262	Mouse complement c
2307	13.4	0.8	20	1	AAH75317	Mouse inducible NO	2380	13.4	0.8	20	1	ADK12304	Detector oligonuc
2308	13.4	0.8	20	1	AAAC92776	Human hnrNP A1 pho	2381	13.4	0.8	20	1	ADL23570	Human VEGF co-regu
2309	13.4	0.8	20	1	AAAC92806	Human hnrNP A1 pho	2382	13.4	0.8	20	1	ADL00909	Human VEGF co-regu
2310	13.4	0.8	20	1	AAAF62218	PCR primer for fac	2383	13.4	0.8	20	1	ADL01357	Human VEGF co-regu
2311	13.4	0.8	20	1	AAAD04441	Forward PCR primer	2384	13.4	0.8	20	1	ADL01249	Human VEGF co-regu
2312	13.4	0.8	20	1	AAAH00813	Cryptosporidium pa	2385	13.4	0.8	20	1	ADM41526	Rice histone deace
2313	13.4	0.8	20	1	AAH22573	PK-2 transgene det	2386	13.4	0.8	20	1	ADM41349	Human mPGES-1 chim
2314	13.4	0.8	20	1	AAH24592	Human endometrium	2387	13.4	0.8	20	1	ADOL3818	Microsatellite ana
2315	13.4	0.8	20	1	AAAD11810	Salmonella typhimu	2388	13.4	0.8	20	1	ADOL3818	Farnesoid X recept
2316	13.4	0.8	20	1	AAAC83279	PCR primer used sp	2389	13.4	0.8	20	1	ADOL3818	Human BRCA2 region
2317	13.4	0.8	20	1	AAH48612	Human fascin assoc	2390	13.4	0.8	20	1	ADP10952	Set 1 left PCR pri
2318	13.4	0.8	20	1	AAAC86079	Primer to detect C	2391	13.4	0.8	20	1	ADP10952	Taqman probe set 2
2319	13.4	0.8	20	1	AAAC86072	Primer to detect T	2392	13.4	0.8	20	1	ADP10952	Human fibrillar
2320	13.4	0.8	20	1	AAAC89135	Canine retroviral	2393	13.4	0.8	20	1	ADP12224	Rat MMP11 DNA anti
2321	13.4	0.8	20	1	AAAF91350	Human E2F transcri	2394	13.4	0.8	20	1	ADP27173	Human ABC2 DNA an
2322	13.4	0.8	20	1	AAH03059	Microorganism dete	2395	13.4	0.8	20	1	ADP27304	Human Talin antise
2323	13.4	0.8	20	1	AAH26635	Human MADH6 mRNA a	2396	13.4	0.8	20	1	ADP19918	Heavy chain variab
2324	13.4	0.8	20	1	AAH26636	Human MADH6 mRNA a	2397	13.4	0.8	20	1	ADP85681	Rice histone deace
2325	13.4	0.8	20	1	AAH42529	PCR primer used to	2398	13.4	0.8	20	1	ADP21189	Human MAD1-like 1
2326	13.4	0.8	20	1	AAAD41542	Cystatin M gene sp	2399	13.4	0.8	20	1	ADP43632	Human beta-site AP
2327	13.4	0.8	20	1	AAAD41116	Primer ON-Dinbl-F3	2400	13.4	0.8	20	1	ADP43570	Human beta-site AP
2328	13.4	0.8	20	1	AAAD41116	Human Talin antise	2401	13.4	0.8	20	1	ADQ08031	Human beta-site AP
2329	13.4	0.8	20	1	AAAL0334	Human caspase 6 an	2402	13.4	0.8	20	1	ADQ08031	C. albicans specif
2330	13.4	0.8	20	1	AAAD40926	Human HPA1 antisen	2403	13.4	0.8	20	1	ADQ08031	Human oligonucleot
2331	13.4	0.8	20	1	AAAD31413	Candida albicans G	2404	13.4	0.8	20	1	ADQ08031	AI024215-derived o
2332	13.4	0.8	20	1	AAAL48224	Human IL-10 coding	2405	13.4	0.8	20	1	ADQ08031	
2333	13.4	0.8	20	1	AB197181	Capture oligonucle	2406	13.2	0.8	20	1	ABZ89410	
2334	13.4	0.8	20	1	ABK49768	Human atopic derma	2407	13.2	0.8	20	1	ABD25640	
2335	13.4	0.8	20	1	ABK69328	Chimeric phosphoro							
2336	13.4	0.8	20	1	ABT03951	Human pol kappa 76							
2337	13.4	0.8	20	1	ABT03951	Human pol kappa 76							
2338	13.4	0.8	20	1	AAAD41680	Human IL-12 p35 su							
2339	13.4	0.8	20	1	ADG90476	Human talin phosph							
2340	13.4	0.8	20	1	ACA97213	Vpr-driven constru							
2341	13.4	0.8	20	1	ABT34199	Mouse short hetero							
2342	13.4	0.8	20	1	ABX78139	Murine p38-alpha M							
2343	13.4	0.8	20	1	ABT43349	Neuroblastoma-rela							
2344	13.4	0.8	20	1	ABX95014	Human MAGS-C2 gene							
2345	13.4	0.8	20	1	AAAD52514	Arabidopsis thalia							
2346	13.4	0.8	20	1	ABT32516	Neuroblastoma-rela							
2347	13.4	0.8	20	1	ACD23029	Human NEMO gene in							
2348	13.4	0.8	20	1	ACC99704	Cyclin D1 PCR prim							
2349	13.4	0.8	20	1	ADA27483	Microorganism seque							
2350	13.4	0.8	20	1	ACD13554	Human bi-direction							
2351	13.4	0.8	20	1	ADA97855	Human tumour necro							
2352	13.4	0.8	20	1	ADB90005	Antisense oligonu							
2353	13.4	0.8	20	1	ADG73020	O-glycan alpha2,8-							
2354	13.4	0.8	20	1	ADG31625	PCR primer used to							
2355	13.4	0.8	20	1	ADG31625	Single nucleotide							
2356	13.4	0.8	20	1	ADG98295	Human SHH specific							
2357	13.4	0.8	20	1	ADG94427	Human gene PCR pri							
2358	13.4	0.8	20	1	ABZ92732	Human oligonucleot							
2359	13.4	0.8	20	1	ABZ87042	Human oligonucleot							
2360	13.4	0.8	20	1	ABZ86781	Human oligonucleot							
2361	13.4	0.8	20	1	ABZ92011	Human oligonucleot							
2362	13.4	0.8	20	1	ABZ75745	Human oligonucleot							
2363	13.4	0.8	20	1	ADA26843	Sorting nexin 3 ge							
2364	13.4	0.8	20	1	ADM34276	Mouse p38 MAPK ant							
2365	13.4	0.8	20	1	ADN23011	Human myosin X-der							
2366	13.4	0.8	20	1	ABD28241	R19956-derived oli							
2367	13.4	0.8	20	1	ABD23272	Human myosin X-der							
2368	13.4	0.8	20	1	ABD27162	AA486518-derived o							
2369	13.4	0.8	20	1	ABD28962	N58473-derived oli							

ALIGNMENTS

RESULT 1

ABAA04099
ID ABA04099 standard; DNA; 33 Bp.

XX ABA04099;

AC ABA04099;

XX 21-FEB-2002 (first entry)

DT Human Cdk5 related PCR primer SEQ ID NO:18.

XX Human; beta-amyloid; cyclin-dependent kinase inhibitor; nerve cell;

XX amyloid precursor protein; APP; Cdk5; PCR primer; ss.

XX Homo sapiens.

OS WO200182967-A1.

XX 08-NOV-2001.

XX 25-APR-2001; 2001WO-JP003555.

XX 28-APR-2000; 2000JP-00131037.

XX (YAMA) YAMANOUCHI PHARM CO LTD.

XX (SUZUKI) SUZUKI T.

XX Suzuki T, Watanabe T, Kawabata S, Hachiya S;

XX WPI; 2002-026209/03.

XX

2151	13.4	0.8	17	1	ABK57129	Human CLCA1 gene e	2224	13.4	0.8	18	1	ADF77896	Human EST clone an
2152	13.4	0.8	17	1	ABK57182	Human CLCA1 gene e	2225	13.4	0.8	19	1	AAQ31195	Alpha 6A integrin
2153	13.4	0.8	17	1	ABK55967	Human CLCA1 gene e	2226	13.4	0.8	19	1	AAV30804	Human prohibitin g
2154	13.4	0.8	17	1	ACN00811	WNV Hammerhead Rib	2227	13.4	0.8	19	1	AAAX31877	S. aureus polypept
2155	13.4	0.8	17	1	ACN13778	WNV minus strand D	2228	13.4	0.8	19	1	AAZ220455	PCR primer BmagsRe
2156	13.4	0.8	17	1	ACN08355	WNV minus strand H	2229	13.4	0.8	19	1	AAZ59837	PCR primer used to
2157	13.4	0.8	17	1	ACN12834	WNV minus strand Z	2230	13.4	0.8	19	1	AAAB83293	cdk8 ribozyme bind
2158	13.4	0.8	17	1	ACN04167	WNV Zinzyne substr	2231	13.4	0.8	19	1	AAAB85159	Targeted chromosom
2159	13.4	0.8	17	1	ACN10716	WNV minus strand I	2232	13.4	0.8	19	1	AAH37489	SNP specific upper
2160	13.4	0.8	17	1	ACN11881	WNV minus strand I	2233	13.4	0.8	19	1	AAH58455	Cell-cycle depende
2161	13.4	0.8	17	1	ACN01704	WNV inozyme substr	2234	13.4	0.8	19	1	ABK24631	Hygromycin-B codin
2162	13.4	0.8	17	1	ACN00210	WNV Hammerhead Rib	2235	13.4	0.8	19	1	AAAL50058	Murine alphabeta T
2163	13.4	0.8	17	1	ACN02575	WNV inozyme substr	2236	13.4	0.8	19	1	ABQ76903	hdm2 protein-assoc
2164	13.4	0.8	17	1	ACN14682	WNV minus strand A	2237	13.4	0.8	19	1	ABSG64429	Human NOVX forward
2165	13.4	0.8	17	1	ACN02546	WNV inozyme substr	2238	13.4	0.8	19	1	ADFC32509	ADH1 reverse trans
2166	13.4	0.8	17	1	ACN11882	WNV minus strand I	2239	13.4	0.8	19	1	ADC39346	Novel human NOVX g
2167	13.4	0.8	17	1	ABT35689	Tumour suppression	2240	13.4	0.8	19	1	ADE29716	Mitogen activated
2168	13.4	0.8	17	1	ACA06589	NFKB sub-unit modu	2241	13.4	0.8	19	1	ADE29821	Mitogen activated
2169	13.4	0.8	17	1	ACA07774	NFKB sub-unit modu	2242	13.4	0.8	19	1	ADF48172	Human Myb siNA low
2170	13.4	0.8	17	1	ACA08921	NFKB sub-unit modu	2243	13.4	0.8	19	1	ADF48193	Human Myb transcri
2171	13.4	0.8	17	1	ABZ65140	Human HER2 DNzyme	2244	13.4	0.8	19	1	ADF71308	Protein tyrosine p
2172	13.4	0.8	17	1	ABZ61477	Human H-Ras DNzyme	2245	13.4	0.8	19	1	ADF71234	Protein tyrosine p
2173	13.4	0.8	17	1	ABZ62006	Human H-Ras DNzyme	2246	13.4	0.8	19	1	ADF86352	Human integrin alp
2174	13.4	0.8	17	1	ABZ64791	Human HER2 DNzyme	2247	13.4	0.8	19	1	ADF84774	Human ABU1-targete
2175	13.4	0.8	17	1	ABZ62005	Human H-Ras DNzyme	2248	13.4	0.8	19	1	ADF84455	Human ABU1-targete
2176	13.4	0.8	17	1	ACD64604	HCV minus strand D	2249	13.4	0.8	19	1	ADF77926	Integrin alpha-6 R
2177	13.4	0.8	17	1	ACD55495	HBV amberzyme subs	2250	13.4	0.8	19	1	ADL79883	Human HER1 (EGFR)
2178	13.4	0.8	17	1	ACD55494	HBV amberzyme subs	2251	13.4	0.8	19	1	ADL79218	Human HER2 (EGFR2)
2179	13.4	0.8	17	1	ACD58065	HCV DNzyme substr	2252	13.4	0.8	19	1	ADL79576	Human HER1 (EGFR)
2180	13.4	0.8	17	1	ACD64603	HCV DNzyme substr	2253	13.4	0.8	19	1	ADL78969	Human HER2 (EGFR2)
2181	13.4	0.8	17	1	ACD51807	HBV inozyme substr	2254	13.4	0.8	19	1	ADN34266	Lower strand of cy
2182	13.4	0.8	17	1	ACD55493	HBV DNzyme substr	2255	13.4	0.8	19	1	ADN34027	Upper strand of cy
2183	13.4	0.8	17	1	ACD54462	HBV inozyme substr	2256	13.4	0.8	19	1	ADN34255	Lower strand of cy
2184	13.4	0.8	17	1	ACC64765	Murine oligonucleo	2257	13.4	0.8	19	1	ADN34016	Upper strand of cy
2185	13.4	0.8	17	1	ACC66050	Murine oligonucleo	2258	13.4	0.8	19	1	ADN69520	Plant gene polymor
2186	13.4	0.8	17	1	ACC68168	Human checkpoint g	2259	13.4	0.8	19	1	ADN75530	Human CDC25B CR re
2187	13.4	0.8	17	1	ABX16354	Human AMLP1a scann	2260	13.4	0.8	19	1	ADN36944	Primer used to seq
2188	13.4	0.8	17	1	ADC37957	Human AMLP1a scann	2261	13.4	0.8	19	1	ADO56525	Human cyclin-depen
2189	13.4	0.8	17	1	ADC37956	Human AMLP1a scann	2262	13.4	0.8	19	1	ADQ60471	Anti-DBI siRNA DB
2190	13.4	0.8	17	1	ADI47583	Human tumour suppr	2263	13.4	0.8	19	1	ADQ60471	Anti-DBI siRNA DB
2191	13.4	0.8	17	1	ACCS4018	Human tumour suppr	2264	13.4	0.8	19	1	ADQ60472	Anti-DBI siRNA DB
2192	13.4	0.8	17	1	ACCS3039	Human tumour suppr	2265	13.4	0.8	19	1	ADQ60472	Anti-DBI siRNA DB
2193	13.4	0.8	17	1	ADL48355	Human IKK-gamma su	2266	13.4	0.8	19	1	ADQ60473	Anti-Firefly lucif
2194	13.4	0.8	17	1	ADL47582	Human IKK-gamma su	2267	13.4	0.8	19	1	ADQ60473	Anti-DBI siRNA DB
2195	13.4	0.8	17	1	ADL47973	Human IKK-gamma su	2268	13.4	0.8	19	1	ADQ61918	Anti-SLC26A1 siRNA
2196	13.4	0.8	17	1	ADL48767	Human IKK-gamma su	2269	13.4	0.8	20	1	AAH61769	Human PCTAIRE prot
2197	13.4	0.8	17	1	ADF92273	Human cytokeatin	2270	13.4	0.8	20	1	ADH48267	Human GRK6 DNA tar
2198	13.4	0.8	17	1	ADH70710	Human Vbeta gene r	2271	13.4	0.8	20	1	ADH48321	Human GRK6 DNA tar
2199	13.4	0.8	17	1	ADM60139	Hepatitis B virus	2272	13.4	0.8	20	1	AAQ15414	Probe to mutant se
2200	13.4	0.8	17	1	ADM58657	Hepatitis B virus	2273	13.4	0.8	20	1	AAQ15283	Probe to mutant se
2201	13.4	0.8	17	1	ADM60138	Hepatitis B virus	2274	13.4	0.8	20	1	AAQ15416	Probe to mutant se
2202	13.4	0.8	17	1	ADM60140	Hepatitis B virus	2275	13.4	0.8	20	1	AAQ48260	Glucocerebrosidase
2203	13.4	0.8	17	1	ADM59729	Hepatitis B virus	2276	13.4	0.8	20	1	AAQ56208	pol amplification
2204	13.4	0.8	17	1	ADI83405	HCV DNzyme substr	2277	13.4	0.8	20	1	AAQ56208	c-RAF protooncogen
2205	13.4	0.8	17	1	ADI86657	HCV DNzyme substr	2278	13.4	0.8	20	1	AAV01136	Homeobox 7 PCR pri
2206	13.4	0.8	17	1	ADI86658	HCV DNzyme substr	2279	13.4	0.8	20	1	AAV01150	T-cell receptor be
2207	13.4	0.8	17	1	ADI86658	HCV DNzyme substr	2280	13.4	0.8	20	1	AAV01194	PCR primer 4 used
2208	13.4	0.8	17	1	AAV12786	Rabbit C/EBP hairpi	2281	13.4	0.8	20	1	AAV97944	Locl-specific prim
2209	13.4	0.8	18	1	AAV150714	Patient-specific C	2282	13.4	0.8	20	1	AAAT68356	Locl-specific prim
2210	13.4	0.8	18	1	AAV73903	Human HLA-A2 A*020	2283	13.4	0.8	20	1	AAAT68376	Human biallelic po
2211	13.4	0.8	18	1	AAV88679	Human G-alpha-13 a	2284	13.4	0.8	20	1	AAV27092	Primer YA6. Synth
2212	13.4	0.8	18	1	AAZ31848	Primer F72 for iso	2285	13.4	0.8	20	1	AAV27081	Primer YS5. Synth
2213	13.4	0.8	18	1	AAZ74421	Human biallelic ma	2286	13.4	0.8	20	1	AAV42487	PCR primer 2 used
2214	13.4	0.8	18	1	ABK52758	SNP specific upper	2287	13.4	0.8	20	1	AAV42508	PCR primer 1 used
2215	13.4	0.8	18	1	ABL44832	Nuclease resistant	2288	13.4	0.8	20	1	AAV05848	3' primer for huma
2216	13.4	0.8	18	1	ABK52758	Human chromosome 1	2289	13.4	0.8	20	1	AAV08608	Primer ACE/184PB f
2217	13.4	0.8	18	1	ABL94603	Rat VR1 antisense	2290	13.4	0.8	20	1	AAZ31321	CXCR4 gene inhibit
2218	13.4	0.8	18	1	ABK52758	SNP specific upper	2291	13.4	0.8	20	1	AAZ31321	PCR primer used to
2219	13.4	0.8	18	1	ABK52758	Nuclease resistant	2292	13.4	0.8	20	1	AAZ31321	Rat high/low molec
2220	13.4	0.8	18	1	ABK52758	Human chromosome 1	2293	13.4	0.8	20	1	AAZ23146	Rat T kininogen PC
2221	13.4	0.8	18	1	ABK52758	SNP specific upper	2294	13.4	0.8	20	1	AAZ23551	Deletion sequence
2222	13.4	0.8	18	1	ABK52758	Rat VR1 antisense	2295	13.4	0.8	20	1	AAV93254	PCR primer used to
2223	13.4	0.8	18	1	ABK52758	SNP-containing car	2296	13.4	0.8	20	1	AAV96164	PCR primer used to

2005	13.6	0.8	20	1	AD119242	Human PCTAIRE prot	c2078	13.6	0.8	20	1	ADP11369	Set 2 right PCR pr
2006	13.6	0.8	20	1	AD119268	Human PCTAIRE prot	c2079	13.6	0.8	20	1	ADP11349	Taqman probe of th
2007	13.6	0.8	20	1	AD119173	Human PCTAIRE prot	c2080	13.6	0.8	20	1	ADP11839	Set 2 left PCR pri
c2008	13.6	0.8	20	1	AD119212	Human PCTAIRE prot	c2081	13.6	0.8	20	1	ADN48571	Human Notch3 DNA a
2009	13.6	0.8	20	1	AD119256	Human PCTAIRE prot	2082	13.6	0.8	20	1	ADN48648	Human Notch3 DNA a
c2010	13.6	0.8	20	1	AD119184	Human PCTAIRE prot	c2083	13.6	0.8	20	1	ADO32604	Antisense 2'-MOE g
2011	13.6	0.8	20	1	AD119186	Human PCTAIRE prot	c2084	13.6	0.8	20	1	ADO55789	Human NIMA-related
c2012	13.6	0.8	20	1	AD119197	Human PCTAIRE prot	2085	13.6	0.8	20	1	ADO55856	Human NIMA-related
2013	13.6	0.8	20	1	AD119263	Human PCTAIRE prot	c2086	13.6	0.8	20	1	ADP27221	Rat matrix metallo
c2014	13.6	0.8	20	1	AD119203	Human PCTAIRE prot	2087	13.6	0.8	20	1	ADP27221	Human GAPDH primer
2015	13.6	0.8	20	1	AD119250	Human PCTAIRE prot	2088	13.6	0.8	20	1	ADO55973	Human tubulin alph
c2016	13.6	0.8	20	1	ADJ32620	Human ERK-6 specif	2089	13.6	0.8	20	1	ADP44524	Human ABC5 DNA an
c2017	13.6	0.8	20	1	ADJ32656	Human ERK-6 target	c2090	13.6	0.8	20	1	ADP44524	Human ABC5 DNA an
2018	13.6	0.8	20	1	ADH80324	MAC2-BP PCR primer	2091	13.6	0.8	20	1	ADP68428	Human ABC5 DNA an
c2019	13.6	0.8	20	1	ADK96009	Primer of the inve	c2092	13.6	0.8	20	1	ADP68428	Human ABC5 DNA an
2020	13.6	0.8	20	1	ADK95547	Primer of the inve	2093	13.6	0.8	20	1	ADP66874	Human STAT 6 antis
2021	13.6	0.8	20	1	ADK96655	Primer of the inve	c2094	13.6	0.8	20	1	ADP66874	Mouse endothelial
2022	13.6	0.8	20	1	ADK95801	Oligonucleotide as	2095	13.6	0.8	20	1	AA226102	Human polymorphic
2023	13.6	0.8	20	1	ADJ61350	Hepatoma-derived g	2096	13.6	0.8	20	1	AA226102	Human gene single
2024	13.6	0.8	20	1	ADJ45364	Hepatoma-derived g	c2097	13.4	0.8	15	1	AAQ24934	Synthetic primer (
c2025	13.6	0.8	20	1	ADJ45293	Human resistin ant	2098	13.4	0.8	15	1	AA24934	Human reIA hammer
2026	13.6	0.8	20	1	ADJ38711	Human resistin ant	c2099	13.4	0.8	15	1	AA24934	Human fit-1 and KD
c2027	13.6	0.8	20	1	ADJ38770	Human EDG1 antisen	c2100	13.4	0.8	15	1	AA24934	DNA sequence of th
2028	13.6	0.8	20	1	ADJ62144	Human EDG1 antisen	c2101	13.4	0.8	15	1	AA24934	Probe used to iden
c2029	13.6	0.8	20	1	ADJ62176	Antisense DNA olig	c2102	13.4	0.8	15	1	AA24934	Tag sequence of a
c2030	13.6	0.8	20	1	ADJ15834	Antisense DNA olig	2103	13.4	0.8	15	1	AA24934	Original DNA templ
2031	13.6	0.8	20	1	ADJ17546	Antisense DNA olig	c2104	13.4	0.8	15	1	AA24934	Acid/base ortholog
2032	13.6	0.8	20	1	ADJ17107	Antisense DNA olig	c2105	13.4	0.8	15	1	AA24934	IGF-1 oligonucleot
c2033	13.6	0.8	20	1	ADJ16943	Antisense DNA olig	c2106	13.4	0.8	15	1	AA24934	IGFBP3 oligonucleo
2034	13.6	0.8	20	1	ADJ17678	Human FasL cDNA, a	c2107	13.4	0.8	15	1	AA24934	IGF-I oligonucleot
c2035	13.6	0.8	20	1	ADJ24114	Human endothelial	c2108	13.4	0.8	15	1	AA24934	IGF-I oligonucleot
c2036	13.6	0.8	20	1	ADJ22164	Chimeric phosphoro	2109	13.4	0.8	15	1	AB234171	HIV-1 reverse tran
c2037	13.6	0.8	20	1	ADK81412	Chimeric phosphoro	c2110	13.4	0.8	15	1	AB234171	Human colon cancer
c2038	13.6	0.8	20	1	ADK78465	Chimeric phosphoro	c2111	13.4	0.8	15	1	AB234171	Human colon cancer
c2039	13.6	0.8	20	1	ADK73521	Chimeric phosphoro	2112	13.4	0.8	15	1	AB234171	Prion protein poly
c2040	13.6	0.8	20	1	ADK73793	Chimeric phosphoro	c2113	13.4	0.8	15	1	AB234171	Ineffective anti-H
2041	13.6	0.8	20	1	ADL00735	Human VEGF co-regu	c2114	13.4	0.8	15	1	AB234171	CMV antisense olig
2042	13.6	0.8	20	1	ADL00975	Human VEGF co-regu	c2115	13.4	0.8	15	1	AB234171	Peptide nucleic ac
2043	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	2116	13.4	0.8	15	1	AB234171	Human flcl VEGF re
2044	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2117	13.4	0.8	15	1	AB234171	Human KDR VEGF rec
c2045	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	2118	13.4	0.8	15	1	AB234171	Human EGF-R target
c2046	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2119	13.4	0.8	15	1	AB234171	Human GDNF gene ex
2047	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2120	13.4	0.8	15	1	AB234171	Anti-CMV oligonucle
c2048	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2121	13.4	0.8	15	1	AB234171	Integrin subunit b
2049	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	2122	13.4	0.8	15	1	AB234171	Integrin alpha 6 s
c2050	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2123	13.4	0.8	15	1	AB234171	Oestrogen receptor
c2051	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	2124	13.4	0.8	15	1	AB234171	Hammerhead ribozyme
c2052	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2125	13.4	0.8	15	1	AB234171	Human CD20 inozyme
c2053	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2126	13.4	0.8	15	1	AB234171	Human cell cycle c
2054	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2127	13.4	0.8	15	1	AB234171	Human oterlin ex
c2055	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2128	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
2056	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2129	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2057	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2130	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
2058	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2131	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2059	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2132	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
2060	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2133	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2061	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2134	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
2062	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2135	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2063	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2136	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2064	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2137	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2065	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2138	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2066	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	2139	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2067	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	2140	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
2068	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2141	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2069	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2142	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
2070	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2143	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2071	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	2144	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
2072	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2145	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2073	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2146	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
2074	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2147	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2075	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	c2148	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
2076	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	2149	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m
c2077	13.6	0.8	20	1	ADL00773	Human VEGF co-regu	2150	13.4	0.8	15	1	AB234171	Human GDMPLP-1 17-m

1859	13.6	0.8	20	1	ABN79624	Human FasL chimera	1932	13.6	0.8	20	1	ADG40071	Viral cDNA PCR pri
1860	13.6	0.8	20	1	ABQ79630	iPPK-2-specific ol	1933	13.6	0.8	20	1	ADG28985	PCR primer SEQ ID
1861	13.6	0.8	20	1	ABQ79631	iPPK-2-specific ol	1934	13.6	0.8	20	1	ADF88118	Single nucleotide
1862	13.6	0.8	20	1	ABL44330	Human chromosome 1	1935	13.6	0.8	20	1	ADF88279	Single nucleotide
1863	13.6	0.8	20	1	ABL43358	Human chromosome 1	1936	13.6	0.8	20	1	ADF91007	Microorganism dete
1864	13.6	0.8	20	1	ABT13395	Human helicase-moi	1937	13.6	0.8	20	1	ADH94130	Human gene PCR pri
1865	13.6	0.8	20	1	AAI67702	SHH patched recept	1938	13.6	0.8	20	1	ADI00246	PCR primer SEQ ID
1866	13.6	0.8	20	1	ABL46178	Human ICAM-1 antis	1939	13.6	0.8	20	1	ADJ53075	BAGE marker gene s
1867	13.6	0.8	20	1	ABK24601	EIP2AK3 gene seque	1940	13.6	0.8	20	1	ABX78206	Human bifunctional
1868	13.6	0.8	20	1	ABT06761	Nucleic acid detec	1941	13.6	0.8	20	1	ABZ90450	Human oligonucleot
1869	13.6	0.8	20	1	ABT06761	Nucleic acid detec	1942	13.6	0.8	20	1	ABZ92603	Human oligonucleot
1870	13.6	0.8	20	1	ABT06761	Nucleic acid detec	1943	13.6	0.8	20	1	ABZ88825	Human oligonucleot
1871	13.6	0.8	20	1	ABT06761	Nucleic acid detec	1944	13.6	0.8	20	1	ABZ87133	Human oligonucleot
1872	13.6	0.8	20	1	ABT06761	Nucleic acid detec	1945	13.6	0.8	20	1	ABZ94417	Human oligonucleot
1873	13.6	0.8	20	1	ABZ31505	Human syntaxin 4 i	1946	13.6	0.8	20	1	ABZ88076	Human oligonucleot
1874	13.6	0.8	20	1	ABA99824	Candida albicans G	1947	13.6	0.8	20	1	ABZ88262	Human oligonucleot
1875	13.6	0.8	20	1	ABN97923	Murine capn2 exon	1948	13.6	0.8	20	1	ABZ84865	Human oligonucleot
1876	13.6	0.8	20	1	ABK43252	GAPDH amplificatio	1949	13.6	0.8	20	1	ABZ85601	Human oligonucleot
1877	13.6	0.8	20	1	ABN80949	Human HKNG1 exon 9	1950	13.6	0.8	20	1	ABZ86435	Human oligonucleot
1878	13.6	0.8	20	1	ABN80949	Mouse caspase 7 ph	1951	13.6	0.8	20	1	ABZ92850	Human oligonucleot
1879	13.6	0.8	20	1	ABN80937	Mouse caspase 7 ph	1952	13.6	0.8	20	1	ABZ75967	Human oligonucleot
1880	13.6	0.8	20	1	ABQ74705	Human Von Willebra	1953	13.6	0.8	20	1	ACC49170	Human HSL chimeric
1881	13.6	0.8	20	1	ABK71229	MAC2-BP gene sense	1954	13.6	0.8	20	1	ACC62163	ICAM-1 inhibitory
1882	13.6	0.8	20	1	RAL46755	Mouse HYPLIP1 locu	1955	13.6	0.8	20	1	ABX13023	Human alipoprotein
1883	13.6	0.8	20	1	AD44724	ICAM antisense oli	1956	13.6	0.8	20	1	ABX13023	Oxidative stress d
1884	13.6	0.8	20	1	ABQ78911	Human c-raf kinase	1957	13.6	0.8	20	1	ABX33984	Human interleukin
1885	13.6	0.8	20	1	ABX97255	S. roseosporus dap	1958	13.6	0.8	20	1	ADA26797	Toxicologically re
1886	13.6	0.8	20	1	AAAS18551	Human NOV-associat	1959	13.6	0.8	20	1	ADA26797	Human PRL-3 forwar
1887	13.6	0.8	20	1	ABL94308	Mouse AGP-3 PCR pr	1960	13.6	0.8	20	1	ADJ72244	Antisense oligonuc
1888	13.6	0.8	20	1	ABK49114	Human C/EBP beta p	1961	13.6	0.8	20	1	ADJ72244	Streptomyces roeco
1889	13.6	0.8	20	1	AB197222	Human KDR/FLK-1 mu	1962	13.6	0.8	20	1	ADJ95311	Novel NOVX gene se
1890	13.6	0.8	20	1	AAAS20906	Capture oligonucle	1963	13.6	0.8	20	1	ADL25030	Intestinal epithel
1891	13.6	0.8	20	1	ABK67749	Mouse transglutami	1964	13.6	0.8	20	1	ADM07061	Aspergillus fumiga
1892	13.6	0.8	20	1	ABQ81403	Human peptid tran	1965	13.6	0.8	20	1	ADM57531	M. tuberculosis PC
1893	13.6	0.8	20	1	ABT08433	Arabidopsis AINTEG	1966	13.6	0.8	20	1	ADM34286	M. tuberculosis PC
1894	13.6	0.8	20	1	ADJ64605	Human Mac2-BP prom	1967	13.6	0.8	20	1	ADM34286	Mouse p38 MAPK ant
1895	13.6	0.8	20	1	ADJ84167	Recombinant blood	1968	13.6	0.8	20	1	ADM34286	Human Factor VIII
1896	13.6	0.8	20	1	ABQ80152	Antisense 2'-MOE g	1969	13.6	0.8	20	1	ADN60140	Human helicase-moi
1897	13.6	0.8	20	1	ACC49159	Right primer DBM00	1970	13.6	0.8	20	1	ABD25055	AA125228-derived o
1898	13.6	0.8	20	1	ACA97206	ICAM-1 inhibitory	1971	13.6	0.8	20	1	ABD21831	AA679352-derived o
1899	13.6	0.8	20	1	ADA44765	Vpr-driven constru	1972	13.6	0.8	20	1	ABD21831	Human stannocalci
1900	13.6	0.8	20	1	ADJ77539	Antisense oligonuc	1973	13.6	0.8	20	1	ABD24306	AT095013-derived o
1901	13.6	0.8	20	1	ADA00242	Nucleotide sequenc	1974	13.6	0.8	20	1	ABD28833	W81570-derived oli
1902	13.6	0.8	20	1	ABZ23813	p38 gene PCR prime	1975	13.6	0.8	20	1	ABD23363	Human myosin X-der
1903	13.6	0.8	20	1	ABX78149	EGFR mRNA inhibiti	1976	13.6	0.8	20	1	ABD23363	Human myosin X-der
1904	13.6	0.8	20	1	ABZ74963	Murine p38-alpha M	1977	13.6	0.8	20	1	ABD28647	T64626-derived oli
1905	13.6	0.8	20	1	ABT43268	Human p70 S6 kinas	1978	13.6	0.8	20	1	ABD21095	Human transglutami
1906	13.6	0.8	20	1	ABQ80265	Neuroblastoma-rela	1979	13.6	0.8	20	1	ABD24492	AT652901-derived o
1907	13.6	0.8	20	1	ACF33771	Flt-4 primer #2.	1980	13.6	0.8	20	1	ABD26680	R00103-derived oli
1908	13.6	0.8	20	1	ABT32380	Human CREB phospho	1981	13.6	0.8	20	1	ADG86690	Human APP-cleaving
1909	13.6	0.8	20	1	ADA20854	Neuroblastoma-rela	1982	13.6	0.8	20	1	ADG86692	Human APP-cleaving
1910	13.6	0.8	20	1	ADA20960	Human BAX chimeric	1983	13.6	0.8	20	1	ADG86742	Human APP-cleaving
1911	13.6	0.8	20	1	ACF39671	MHC class II trans	1984	13.6	0.8	20	1	ADG64275	Y copy of Adican
1912	13.6	0.8	20	1	RAL61864	Human ETBR-LP-2 an	1985	13.6	0.8	20	1	ADG72074	Human SREBP-1 anti
1913	13.6	0.8	20	1	AAI61863	Human ETBR-LP-2 an	1986	13.6	0.8	20	1	ADH18063	Human SREBP-1 targ
1914	13.6	0.8	20	1	ACD99549	Immunostimulatory	1987	13.6	0.8	20	1	ADH18063	2'-MOE gapper anti
1915	13.6	0.8	20	1	ACF04246	Mouse HYPLIP1 locu	1988	13.6	0.8	20	1	ADH12228	Human CHD5 PCR pri
1916	13.6	0.8	20	1	ACH66607	Murine embryonic c	1989	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1917	13.6	0.8	20	1	ADB95930	Sense PCR primer u	1990	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1918	13.6	0.8	20	1	ADB95930	Sense PCR primer u	1991	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1919	13.6	0.8	20	1	ADB36618	Immunostimulatory	1992	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1920	13.6	0.8	20	1	ADB65935	Clone specific PCR	1993	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1921	13.6	0.8	20	1	ADC65807	Mouse TGF-beta rec	1994	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1922	13.6	0.8	20	1	ADC10516	Human NOVX polypep	1995	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1923	13.6	0.8	20	1	ADC38989	Human ICAM-1 target	1996	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1924	13.6	0.8	20	1	AAAS8980	Human ICAM-1 antis	1997	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1925	13.6	0.8	20	1	AAAS9446	Human ICAM-1 antis	1998	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1926	13.6	0.8	20	1	AAAS9445	S-iPPK-2 (A) sense	1999	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1927	13.6	0.8	20	1	ADD22540	Flatfish rhabdovir	2000	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1928	13.6	0.8	20	1	ADG68463	SNP typing-related	2001	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1929	13.6	0.8	20	1	ADF18650	Mouse X-box bindin	2002	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1930	13.6	0.8	20	1	ADF11610	Bovine pregnancy a	2003	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1931	13.6	0.8	20	1	ADF09715	Human c-raf kinase	2004	13.6	0.8	20	1	ADH44477	Human CHD5 PCR pri
1932	13.6	0.8	20	1	ADP08240	APOAV PCR primer #							

1713	13.8	0.8	21	1	ADW74772	Zg-lectin protein	c1786	13.6	0.8	20	1	AAA60155	Human PPARbeta gen
1714	13.8	0.8	21	1	ADN28579	Human IL4R polymor	1787	13.6	0.8	20	1	AAA59793	Primer for p38 nuc
1715	13.8	0.8	21	1	ADN29006	Human IL4R wild ty	c1788	13.6	0.8	20	1	AAZ48795	PCR primer for mou
1716	13.8	0.8	21	1	ADP86504	Gelatinase related	c1789	13.6	0.8	20	1	AAZ39994	PCR primer for hum
1717	13.8	0.8	21	1	ADP71076	Mutant human IL-10	1790	13.6	0.8	20	1	AAZ298298	Plasmodium DBL fam
1718	13.6	0.8	15	1	AAI41783	Human MC2R gene AS	c1791	13.6	0.8	20	1	AAZ48638	ICAM-1 antisense i
1719	13.6	0.8	20	1	AAQ06909	MMV4B nucleotide c	c1792	13.6	0.8	20	1	AAZ49378	Mouse p16 PCR prim
1720	13.6	0.8	20	1	AAQ013687	N-ras gene codon 1	1793	13.6	0.8	20	1	AAZ61834	Antisense oligonuc
1721	13.6	0.8	20	1	AAQ022643	Antisense oligonuc	c1794	13.6	0.8	20	1	AAZ7261	Human diallelic ma
1722	13.6	0.8	20	1	AAQ66488	K-ras codon 12 MTO	1795	13.6	0.8	20	1	AAZ14488	Primer #13 in inve
1723	13.6	0.8	20	1	AAQ44522	Antisense oligonuc	c1796	13.6	0.8	20	1	AAQ09667	Human SHP-1 antise
1724	13.6	0.8	20	1	AAQ44522	Sequence of PCR pr	c1797	13.6	0.8	20	1	AAZ63936	PCR primer for mur
1725	13.6	0.8	20	1	AAQ67992	PCR primer for the	c1798	13.6	0.8	20	1	AAZ49337	ICAM-1 targetted p
1726	13.6	0.8	20	1	AAQ71023	Probe for identify	c1799	13.6	0.8	20	1	AAZ44889	Human K-ras PCR pr
1727	13.6	0.8	20	1	AAQ71501	EAA5 receptor PCR	c1800	13.6	0.8	20	1	AAZ89211	Human glyceraldehy
1728	13.6	0.8	20	1	AAQ91248	Peptide Nucleic ac	c1801	13.6	0.8	20	1	AAA11188	Mouse multiple tum
1729	13.6	0.8	20	1	AAQ91248	P16-specific mouse	c1802	13.6	0.8	20	1	AAZ48909	Human ICAM-1 antis
1730	13.6	0.8	20	1	AAQ99937	Peptide nucleic ac	1803	13.6	0.8	20	1	AAZ68206	Gene typing PCR pr
1731	13.6	0.8	20	1	AAQ81115	Peptide nucleic ac	1804	13.6	0.8	20	1	AAZ66586	Gene typing PCR pr
1732	13.6	0.8	20	1	AAQ81119	PCR primer to gene	c1805	13.6	0.8	20	1	AAA94747	Oligonucleotide #1
1733	13.6	0.8	20	1	AAQ80945	Multiple tumour su	c1806	13.6	0.8	20	1	AAZ73459	Human c-rai kinase
1734	13.6	0.8	20	1	AAQ00729	Human ICAM modifie	c1807	13.6	0.8	20	1	AAZ60947	Human c-rai kinase
1735	13.6	0.8	20	1	AAQ88741	Human gene signatu	1808	13.6	0.8	20	1	AAZ83137	Cell cycle regulat
1736	13.6	0.8	20	1	AAZ41336	Human Fas ligand p	c1809	13.6	0.8	20	1	AAZ79550	Murine p38beta ant
1737	13.6	0.8	20	1	AAQ99517	Human Fas ligand p	1810	13.6	0.8	20	1	AAZ79550	B. brevis MRPS gen
1738	13.6	0.8	20	1	AAZ44449	Antisense oligonuc	c1811	13.6	0.8	20	1	AAZ76673	Bone resorption mo
1739	13.6	0.8	20	1	AAZ44250	ICAM antisense com	1812	13.6	0.8	20	1	AAZ14761	Human glycogen syn
1740	13.6	0.8	20	1	AAZ33922	ICAM expression in	c1813	13.6	0.8	20	1	AAZ14761	Oligonucleotide #7
1741	13.6	0.8	20	1	AAZ15587	Primer for Min mut	c1814	13.6	0.8	20	1	AAZ81175	Human bcl-6 phosph
1742	13.6	0.8	20	1	AAZ30227	Antisense oligonuc	c1815	13.6	0.8	20	1	AAZ81175	Primer #16. Homo
1743	13.6	0.8	20	1	AAZ24204	Phosphonomonoester	1816	13.6	0.8	20	1	AAZ11340	Human cot oncogene
1744	13.6	0.8	20	1	AAZ77491	Human c-rai kinase	c1817	13.6	0.8	20	1	AAZ11340	Human PARP-3 antis
1745	13.6	0.8	20	1	AAZ61877	Human potassium ch	c1818	13.6	0.8	20	1	AAZ45859	Human PARP-2 antis
1746	13.6	0.8	20	1	AAZ72304	Complementary huma	c1819	13.6	0.8	20	1	AAZ45704	Human hnRNP A1 pho
1747	13.6	0.8	20	1	AAZ72304	P16 promoter speci	1821	13.6	0.8	20	1	AAZ92774	Anti-ICAM-1 oligon
1748	13.6	0.8	20	1	AAZ7409	Human or simian im	c1822	13.6	0.8	20	1	AAZ56094	Mouse sfrp3 gene s
1749	13.6	0.8	20	1	AAZ94038	Primer #35 for cys	1823	13.6	0.8	20	1	AAZ56094	Human SFRP4 gene s
1750	13.6	0.8	20	1	AAZ53844	Forward PCR primer	c1824	13.6	0.8	20	1	AAZ56094	PCR primer Rp.2 tre
1751	13.6	0.8	20	1	AAZ47686	Nucleotide sequenc	c1825	13.6	0.8	20	1	AAZ56094	FITC-labeled ICAM
1752	13.6	0.8	20	1	AAZ60732	Unmethylated CpG d	1826	13.6	0.8	20	1	AAZ56094	PCR primer used to
1753	13.6	0.8	20	1	AAZ60732	Primer #2 for huma	c1827	13.6	0.8	20	1	AAZ56094	Immunostimulatory
1754	13.6	0.8	20	1	AAZ60732	Human c-fos protei	1828	13.6	0.8	20	1	AAZ56094	p38 gene PCR prime
1755	13.6	0.8	20	1	AAZ11263	Human MTS1 and MTS	c1829	13.6	0.8	20	1	AAZ56094	Human antileukopro
1756	13.6	0.8	20	1	AAZ18169	PTK 19 gene specif	1830	13.6	0.8	20	1	AAZ56094	PCR primer for nuc
1757	13.6	0.8	20	1	AAZ18167	PTK 18 gene specif	c1831	13.6	0.8	20	1	AAZ56094	Mouse P16beta cDNA
1758	13.6	0.8	20	1	AAZ18165	PTK 17 gene specif	1832	13.6	0.8	20	1	AAZ56094	Human fascin assoc
1759	13.6	0.8	20	1	AAZ20188	Pregnancy associat	c1833	13.6	0.8	20	1	AAZ56094	Primer used to amp
1760	13.6	0.8	20	1	AAZ20188	Human GABA B recep	1834	13.6	0.8	20	1	AAZ56094	Probe used to dete
1761	13.6	0.8	20	1	AAZ20188	Human GABA B recep	c1835	13.6	0.8	20	1	AAZ56094	Human iPPK-2 DNA s
1762	13.6	0.8	20	1	AAZ58122	Human iPPK-2 antis	1836	13.6	0.8	20	1	AAZ56094	Human iPPK-2 DNA s
1763	13.6	0.8	20	1	AAZ58122	CPG-N motif O-ODN	1837	13.6	0.8	20	1	AAZ56094	Primer #18. Homo
1764	13.6	0.8	20	1	AAZ58122	ICAM-1 antisense o	c1838	13.6	0.8	20	1	AAZ56094	Primer used to amp
1765	13.6	0.8	20	1	AAZ58122	PCR primer used to	c1839	13.6	0.8	20	1	AAZ56094	Anti-ICAM oligonuc
1766	13.6	0.8	20	1	AAZ58122	PCR primer used to	1840	13.6	0.8	20	1	AAZ56094	DNA 20-mer ASO (an
1767	13.6	0.8	20	1	AAZ58122	PCR primer used to	c1841	13.6	0.8	20	1	AAZ56094	Human intracellular
1768	13.6	0.8	20	1	AAZ58122	PCR primer used to	1842	13.6	0.8	20	1	AAZ56094	Human COL9A2 PCR p
1769	13.6	0.8	20	1	AAZ58122	Forward PCR primer	c1843	13.6	0.8	20	1	AAZ56094	Intracellular-adhe
1770	13.6	0.8	20	1	AAZ58122	Primer #2 for ampl	1844	13.6	0.8	20	1	AAZ56094	ICAM-1 targetted an
1771	13.6	0.8	20	1	AAZ58122	Human alpha-7 nico	c1845	13.6	0.8	20	1	AAZ56094	HMV4a nuclear prot
1772	13.6	0.8	20	1	AAZ58122	Tumour necrosis fa	1846	13.6	0.8	20	1	AAZ56094	Collagenase 1 gene
1773	13.6	0.8	20	1	AAZ58122	PCR primer used to	c1847	13.6	0.8	20	1	AAZ56094	ARF/HK33 protein r
1774	13.6	0.8	20	1	AAZ58122	PCR primer used to	1848	13.6	0.8	20	1	AAZ56094	Mouse FLIP-c chime
1775	13.6	0.8	20	1	AAZ58122	PCR primer used to	1849	13.6	0.8	20	1	AAZ56094	Human leukocyte an
1776	13.6	0.8	20	1	AAZ58122	PCR primer used to	1850	13.6	0.8	20	1	AAZ56094	Human SAC1 gene-sp
1777	13.6	0.8	20	1	AAZ58122	PCR primer used to	1851	13.6	0.8	20	1	AAZ56094	Maturation/activat
1778	13.6	0.8	20	1	AAZ58122	PCR primer used to	c1852	13.6	0.8	20	1	AAZ56094	Human glioma-associ
1779	13.6	0.8	20	1	AAZ58122	PCR primer used to	1853	13.6	0.8	20	1	AAZ56094	Angiogenesis inhib
1780	13.6	0.8	20	1	AAZ58122	PCR primer used to	c1854	13.6	0.8	20	1	AAZ56094	Immunostimulatory
1781	13.6	0.8	20	1	AAZ58122	3' RACE nested pri	1855	13.6	0.8	20	1	AAZ56094	Human/mouse protei
1782	13.6	0.8	20	1	AAZ58122	Mouse P16 gene pri	c1856	13.6	0.8	20	1	AAZ56094	ICAM-1 targetted an
1783	13.6	0.8	20	1	AAZ58122	Phosphorothioate o	c1857	13.6	0.8	20	1	AAZ56094	Mouse HYPLIPI locu
1784	13.6	0.8	20	1	AAZ58122		c1858	13.6	0.8	20	1	AAZ56094	Human PTP1B antise
1785	13.6	0.8	20	1	AAZ58122								

1567	13.8	0.8	20	1	ABZ911330	Human oligonucleot	c1640	13.8	0.8	20	1	ADP76418	Chimeric phosphoro
c1568	13.8	0.8	20	1	ABZ933366	Human oligonucleot	c1641	13.8	0.8	20	1	ADP76359	Chimeric phosphoro
c1569	13.8	0.8	20	1	ABZ85750	Human oligonucleot	c1642	13.8	0.8	20	1	ADP11154	Set 1 right PCR pri
1570	13.8	0.8	20	1	ABZ57272	Human PDEF DNA, PC	c1643	13.8	0.8	20	1	ADP11872	Set 2 left PCR pri
1571	13.8	0.8	20	1	ABZ80343	Mouse Emx1 antisen	1644	13.8	0.8	20	1	ADP10747	Set 1 left PCR pri
1572	13.8	0.8	20	1	ABX33976	Human interleukin	c1645	13.8	0.8	20	1	ADN48631	Human Notch3 DNA a
c1573	13.8	0.8	20	1	ACD42154	Human raf-associat	c1646	13.8	0.8	20	1	ADOS5652	Human presynaptic
c1574	13.8	0.8	20	1	ADJ83180	RT-PCR primer used	c1647	13.8	0.8	20	1	ADOS5087	Human adipophilin
c1575	13.8	0.8	20	1	ADH83655	Cyclin 14-3-3 sigm	1648	13.8	0.8	20	1	ADP85732	Human Talin antisen
c1576	13.8	0.8	20	1	ADH83662	Human IL5-R derive	c1649	13.8	0.8	20	1	ADP74448	Human NRF antisens
c1577	13.8	0.8	20	1	ABD29596	H86812-derived oli	c1650	13.8	0.8	20	1	ADQ09470	Murine Angiopoieti
c1578	13.8	0.8	20	1	ABD21980	Human stanniocalci	c1651	13.8	0.8	20	1	ADP68804	Mouse PPAR-alpha a
c1579	13.8	0.8	20	1	ABD22500	Human cathepsin C-	1652	13.8	0.8	20	1	ADP68800	Mouse PPAR-alpha a
c1580	13.8	0.8	20	1	ABD27560	AA504431-derived O	1653	13.8	0.8	20	1	ADP96460	Human DUSP6 antis
c1581	13.8	0.8	20	1	ADH22566	AI024215-derived O	1654	13.8	0.8	21	1	AAQ03910	HPV6 typing probe
c1582	13.8	0.8	20	1	ADH4907	Human BRCA 1 and B	1655	13.8	0.8	21	1	AAQ27035	Primer for hepatit
c1583	13.8	0.8	20	1	ADP75344	Human endophilin 2	1656	13.8	0.8	21	1	AAQ05593	Primer for heparit
c1584	13.8	0.8	20	1	ADE64291	C. tropicalis CYP5	1657	13.8	0.8	21	1	AAQ56381	Li consensus prime
c1585	13.8	0.8	20	1	ADG866739	Human APP-cleaving	c1658	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1586	13.8	0.8	20	1	ADG86683	Human APP-cleaving	c1659	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1587	13.8	0.8	20	1	ADH27256	Ferritin related O	1660	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1588	13.8	0.8	20	1	ADG72117	Mouse SREBP-1 anti	c1661	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1589	13.8	0.8	20	1	ADG72234	Mouse SREBP-1 targ	c1662	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1590	13.8	0.8	20	1	ADG72049	Human SREBP-1 anti	1663	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1591	13.8	0.8	20	1	ADG72186	Human SREBP-1 targ	c1664	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1592	13.8	0.8	20	1	ADG72110	Mouse SREBP-1 anti	1665	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1593	13.8	0.8	20	1	ADG72241	Mouse SREBP-1 targ	1666	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1594	13.8	0.8	20	1	ADH67282	Human glucocortic	1667	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1595	13.8	0.8	20	1	ADH67282	Human glucocortic	1668	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1596	13.8	0.8	20	1	ADH54740	Human VEGF-C antis	1669	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1597	13.8	0.8	20	1	ADH89647	Human Livin target	c1670	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1598	13.8	0.8	20	1	ADH89572	Human Livin antis	1671	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1599	13.8	0.8	20	1	ADI79577	Human HMG-CoA redu	1672	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1600	13.8	0.8	20	1	ADI79577	Human HMG-CoA redu	c1673	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1601	13.8	0.8	20	1	ADI38820	Human LIM domain k	c1674	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1602	13.8	0.8	20	1	ADI38749	Human LIM domain k	1675	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1603	13.8	0.8	20	1	ADI38608	Dual specific phos	c1676	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1604	13.8	0.8	20	1	ADI26884	Cyclin dependent k	1677	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1605	13.8	0.8	20	1	ADI26884	Mouse Sema3C rever	c1678	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1606	13.8	0.8	20	1	ADI79383	Human PCTAIRE prot	c1679	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1607	13.8	0.8	20	1	ADI19269	Human PCTAIRE prot	c1680	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1608	13.8	0.8	20	1	ADI19213	Human PCTAIRE prot	1681	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1609	13.8	0.8	20	1	ADJ31669	Human haem oxygena	c1682	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1610	13.8	0.8	20	1	ADJ36703	Human gene 216 SNP	c1683	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1611	13.8	0.8	20	1	ADJ36763	Human gene 216 SNP	c1684	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1612	13.8	0.8	20	1	ADK96976	Primer of the inve	c1685	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1613	13.8	0.8	20	1	ADK34803	Primer of the inve	c1686	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1614	13.8	0.8	20	1	ADJ61393	Oligonucleotide as	c1687	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1615	13.8	0.8	20	1	ADJ59452	Oligonucleotide as	1688	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1616	13.8	0.8	20	1	ADJ93778	Forward primer Ex3	1689	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1617	13.8	0.8	20	1	ADJ64147	Human phospholipas	c1690	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1618	13.8	0.8	20	1	ADJ64112	Human phospholipas	c1691	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1619	13.8	0.8	20	1	ADJ15785	Antisense DNA olig	c1692	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1620	13.8	0.8	20	1	ADJ18538	Antisense DNA olig	c1693	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1621	13.8	0.8	20	1	ADJ18799	Antisense DNA olig	1694	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1622	13.8	0.8	20	1	ADJ15666	Antisense DNA olig	1695	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1623	13.8	0.8	20	1	ADJ18672	Antisense DNA olig	c1696	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1624	13.8	0.8	20	1	ADJ18843	Antisense DNA olig	1697	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1625	13.8	0.8	20	1	ADJ15753	Antisense DNA olig	c1698	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1626	13.8	0.8	20	1	ADJ18877	Antisense DNA olig	c1699	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1627	13.8	0.8	20	1	ADJ17468	Antisense DNA olig	c1700	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1628	13.8	0.8	20	1	ADJ15597	Antisense DNA olig	1701	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1629	13.8	0.8	20	1	ADJ12315	Antisense DNA olig	1702	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1630	13.8	0.8	20	1	ADJ26672	Mouse complement c	1703	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1631	13.8	0.8	20	1	ADL81342	Candida tropicalis	c1704	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1632	13.8	0.8	20	1	ADL81342	Gene 216 SSCP prim	c1705	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1633	13.8	0.8	20	1	ADL323383	Gene 216 SSCP prim	1706	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1634	13.8	0.8	20	1	ADM93686	Clone specific PCR	c1707	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1635	13.8	0.8	20	1	ADM14790	Human NOVX PCR pri	1708	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1636	13.8	0.8	20	1	ADM14933	Human mPGES-1 chim	c1709	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1637	13.8	0.8	20	1	ADQ46793	Human mPGES-1 chim	c1710	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
c1638	13.8	0.8	20	1	ADQ46793	Human oligonucleot	1711	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1639	13.8	0.8	20	1	ADQ44942	Human oligonucleot	1712	13.8	0.8	21	1	AAQ57082	Glucose oxidase se
1639	13.8	0.8	20	1	ADM16195	Murine SAC1 DNA PC							

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Chimeric phosphoro
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Set 1 left PCR pri
Human Notch3 DNA a
Human presynaptic
Human adipophilin
Human Talin antisen
Human NRF antisens
Murine Angiopoieti
Mouse PPAR-alpha a
Mouse PPAR-alpha a
Human DUSP6 antis
HPV6 typing probe
Primer for hepatit
Primer for heparit
Li consensus prime
Glucose oxidase se
Plasmid Yepl/GOD-
Human papilloma vi
Family 2 bFGF DNA
Human leukocyte an
Chemokine receptor
HPV typing probe M
Human papillomavir
Homo sapiens gp-Fy
Probe MY12 for hum
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1421	13.8	0.8	19	1	AAH57801	Cell-cycle depende	1494	13.8	0.8	20	1	AAA78243	Anti-human Fas ant
1422	13.8	0.8	19	1	AAH58182	Cell-cycle depende	c1495	13.8	0.8	20	1	AAZ59944	Human dopamine bet
1423	13.8	0.8	19	1	AAH57891	Cell-cycle depende	1496	13.8	0.8	20	1	AAA92148	Human lhx3 exon 6
1424	13.8	0.8	19	1	AAH57910	Cell-cycle depende	1497	13.8	0.8	20	1	AAA66884	Dog genomic marker
1425	13.8	0.8	19	1	AAH58049	Cell-cycle depende	1498	13.8	0.8	20	1	AAK95171	Human cDNA clone-s
1426	13.8	0.8	19	1	AAH57596	Cell-cycle depende	c1499	13.8	0.8	20	1	AAH20451	L. monocytogenes l
1427	13.8	0.8	19	1	AAH57911	Cell-cycle depende	1500	13.8	0.8	20	1	AAH23401	Human MWIP mRNA in
c1428	13.8	0.8	19	1	AAH57829	Human casein kinas	1501	13.8	0.8	20	1	AAH23401	Immunostimulatory
c1429	13.8	0.8	19	1	AAH57837	Chinese hamster HM	c1502	13.8	0.8	20	1	AAH48588	Human fascin assoc
1430	13.8	0.8	19	1	ABL43700	Human chromosome 1	c1503	13.8	0.8	20	1	AAH48588	Canine retroviral
c1431	13.8	0.8	19	1	ABS97865	Human UDP-glucuron	1504	13.8	0.8	20	1	AAH76258	PCR primer used to
c1432	13.8	0.8	19	1	ABL95971	Probe #46 for asna	1505	13.8	0.8	20	1	AAH76258	Human GABA (A) rece
c1433	13.8	0.8	19	1	ABL95954	Probe #31 for asna	c1506	13.8	0.8	20	1	AAH76258	Human IL4Ralpha ge
c1434	13.8	0.8	19	1	ABL95969	Probe #44 for asna	c1507	13.8	0.8	20	1	AAH76258	Human IL4Ralpha ge
1435	13.8	0.8	19	1	ABL95961	Probe #38 for asna	1508	13.8	0.8	20	1	ABZ72182	Gene 216 SSCP dete
1436	13.8	0.8	19	1	ACF62643	Cancer based on Cy	c1509	13.8	0.8	20	1	ABZ72182	Gene 216 SSCP dete
c1437	13.8	0.8	19	1	ADB21131	Cancer based on Cy	c1510	13.8	0.8	20	1	ABZ72182	Rat GPCR ligand Bv
1438	13.8	0.8	19	1	ADB21131	MRP1 based cancer	c1511	13.8	0.8	20	1	ABZ72182	PCR primer PV3 use
c1439	13.8	0.8	19	1	ADB21131	MRP1 based cancer	1512	13.8	0.8	20	1	ABZ72182	Rice lesion inhibi
1440	13.8	0.8	19	1	ADB21131	Human UGT1A1 varia	1513	13.8	0.8	20	1	ABZ72182	Murine SAC1 gene-s
c1441	13.8	0.8	19	1	ADB21131	Human UGT1A1 varia	1514	13.8	0.8	20	1	ABZ72182	Human Talin antise
1442	13.8	0.8	19	1	ADB97385	Human MDR1 variant	c1515	13.8	0.8	20	1	ABZ72182	Angiogenesis inhib
c1443	13.8	0.8	19	1	ADB97385	Human MDR1 variant	c1516	13.8	0.8	20	1	ABZ72182	Human LSR gene bia
1444	13.8	0.8	19	1	ADB92576	Human MDR1 variant	c1517	13.8	0.8	20	1	ABZ72182	T. tauschii/wheat
c1445	13.8	0.8	19	1	ADB92577	Human MDR1 variant	1518	13.8	0.8	20	1	ABZ72182	Human NOV8 RTO-PCR
c1446	13.8	0.8	19	1	ADB98903	Hamster high mobil	1519	13.8	0.8	20	1	ABZ72182	Mouse caspase 6 an
1447	13.8	0.8	19	1	ADB27518	Stearoyl-CoA desat	c1520	13.8	0.8	20	1	ABZ72182	Human cytohesin-1
c1448	13.8	0.8	19	1	ADB27228	Human VEGFR3 short	c1521	13.8	0.8	20	1	ABZ72182	Human chromosome 1
1449	13.8	0.8	19	1	ADF37256	Human VEGFR3 short	c1522	13.8	0.8	20	1	ABZ72182	Human MEKK4 antise
c1450	13.8	0.8	19	1	ADF37503	Human IGF-1R siNA	1523	13.8	0.8	20	1	ABZ72182	Cyclin 14-3-3 sigm
1451	13.8	0.8	19	1	ADF31705	Human IGF-1R trans	1524	13.8	0.8	20	1	ABZ72182	Candida albicans G
c1452	13.8	0.8	19	1	ADF31428	Apolipoprotein C-I	1525	13.8	0.8	20	1	ABZ72182	Candida albicans G
1453	13.8	0.8	19	1	ADF13336	Human ABL1-targete	c1526	13.8	0.8	20	1	ABZ72182	Candida tropicalis
c1454	13.8	0.8	19	1	ADF84627	Human ABL1-targete	c1527	13.8	0.8	20	1	ABZ72182	Mouse adipose prot
1455	13.8	0.8	19	1	ADF84791	Human ABL1-targete	1528	13.8	0.8	20	1	ABZ72182	Human raf kinase r
c1456	13.8	0.8	19	1	ADF84438	Human ABL1-targete	1529	13.8	0.8	20	1	ABZ72182	Mouse syndecan-1 r
c1457	13.8	0.8	19	1	ADF84472	Human ABL1-targete	c1530	13.8	0.8	20	1	ABZ72182	Human cytohesin-1
1458	13.8	0.8	19	1	ADM92292	SNP-containing car	c1531	13.8	0.8	20	1	ABZ72182	Capture oligonucle
c1459	13.8	0.8	19	1	ADM94705	Human VEGF-C PCR p	c1532	13.8	0.8	20	1	ABZ72182	Capture oligonucle
1460	13.8	0.8	19	1	ADH54705	Human VEGF-C PCR p	1533	13.8	0.8	20	1	ABZ72182	Rat G protein-coup
c1461	13.8	0.8	19	1	ADH54705	Human LIPIN3 exon1	c1534	13.8	0.8	20	1	ABZ72182	Human talin phosph
c1462	13.8	0.8	19	1	ADQ60589	Anti-Firefly lucif	1535	13.8	0.8	20	1	ABZ72182	Human ABC12 exon
c1463	13.8	0.8	19	1	ADQ60589	Anti-Firefly lucif	c1536	13.8	0.8	20	1	ABZ72182	Human gene 216 pol
c1464	13.8	0.8	20	1	AAQ15432	HPV-16 control pri	1537	13.8	0.8	20	1	ABZ72182	Human gene 216 pol
1465	13.8	0.8	20	1	AAQ15430	HPV-16 primer dU1	c1538	13.8	0.8	20	1	ABZ72182	Human FGFR-3 antis
c1466	13.8	0.8	20	1	AAQ34599	HPV-6 probe. Synt	1539	13.8	0.8	20	1	ABZ72182	Human LAMA3 revers
c1467	13.8	0.8	20	1	AAQ34598	Human papilloma v1	c1540	13.8	0.8	20	1	ABZ72182	FADD antisense PCR
c1468	13.8	0.8	20	1	AAQ44798	PCR primer PV3(5')	1541	13.8	0.8	20	1	ABZ72182	Immunostimulatory
c1469	13.8	0.8	20	1	AAQ44798	HPV16/PT713 primer	c1542	13.8	0.8	20	1	ABZ72182	Immunostimulatory
1470	13.8	0.8	20	1	AAQ05336	Peptide transport	1543	13.8	0.8	20	1	ABZ72182	Antisense oligonu
c1471	13.8	0.8	20	1	AAQ05336	Primer for amplify	1544	13.8	0.8	20	1	ABZ72182	Antisense oligo. (S
c1472	13.8	0.8	20	1	AAQ05336	Mouse Huntington's	c1545	13.8	0.8	20	1	ABZ72182	Human retinal pigm
c1473	13.8	0.8	20	1	AAQ03721	Primer SHR-16 for	1546	13.8	0.8	20	1	ABZ72182	Human TGF-beta rec
c1474	13.8	0.8	20	1	AAQ03721	Variant #6 of univ	c1547	13.8	0.8	20	1	ABZ72182	Tannin biosynthesi
c1475	13.8	0.8	20	1	AAQ06254	Puromycin-sensitiv	1548	13.8	0.8	20	1	ABZ72182	Yeast CYP52A5A/B g
c1476	13.8	0.8	20	1	AAQ33259	HPV type 16 gene a	c1549	13.8	0.8	20	1	ABZ72182	Yeast CYP52A5A/B g
c1477	13.8	0.8	20	1	AAQ59567	Mouse LRP-3 cDNA p	1550	13.8	0.8	20	1	ABZ72182	Human CD81/TAPA-1
c1478	13.8	0.8	20	1	AAQ37333	Cancer associated	1551	13.8	0.8	20	1	ABZ72182	Human papillomavir
c1479	13.8	0.8	20	1	AAV54679	Human papillomavir	c1552	13.8	0.8	20	1	ABZ72182	Human papillomavir
c1480	13.8	0.8	20	1	AAV69985	Human c-jun protei	1553	13.8	0.8	20	1	ABZ72182	Angiogenesis inhib
c1481	13.8	0.8	20	1	AAV32934	Human cyclin-depen	c1554	13.8	0.8	20	1	ABZ72182	Human infertility
c1482	13.8	0.8	20	1	AAV05691	Barnase open readi	1555	13.8	0.8	20	1	ABZ72182	Reverse Ag2597 RT-
1483	13.8	0.8	20	1	AAZ04231	CCR5 gene inhibiti	1556	13.8	0.8	20	1	ABZ72182	C. tropicalis CYP5
c1484	13.8	0.8	20	1	AAZ05240	PCR primer used to	1557	13.8	0.8	20	1	ABZ72182	C. tropicalis CYP5
c1485	13.8	0.8	20	1	AAZ05240	PCR primer used to	1558	13.8	0.8	20	1	ABZ72182	HPV 6 detecting pr
c1486	13.8	0.8	20	1	AAZ92036	Deletion sequence	1559	13.8	0.8	20	1	ABZ72182	HPV 6 detecting pr
1487	13.8	0.8	20	1	AAZ46520	PCR primer used to	1560	13.8	0.8	20	1	ABZ72182	ADFA4138
c1488	13.8	0.8	20	1	AAZ69753	Human EST JRL4A1 a	c1561	13.8	0.8	20	1	ABZ72182	ADFA4138
c1489	13.8	0.8	20	1	AAZ61782	Human biallelic ma	1562	13.8	0.8	20	1	ABZ72182	ADFA4138
c1490	13.8	0.8	20	1	AAH89471	Human serine prote	c1563	13.8	0.8	20	1	ABZ72182	ADFA4138
c1491	13.8	0.8	20	1	AAA29848	PCR primer used to	c1564	13.8	0.8	20	1	ABZ72182	ADFA4138
c1492	13.8	0.8	20	1	AAA29848	Human jun N-termin	c1565	13.8	0.8	20	1	ABZ72182	ADFA4138
1493	13.8	0.8	20	1	AAA30532	C. tropicalis CYP5	1566	13.8	0.8	20	1	ABZ72182	ADFA4138

c1275	14	0.8	20	1	ABZ22802	Human heparanase p	1348	13.8	0.8	17	1	ABZ65100	Human HER2 DNazyme
c1276	14	0.8	20	1	ACB68648	Mouse VEGFR-1 chim	c1349	13.8	0.8	17	1	ABZ62059	Human H-Ras DNazyme
c1277	14	0.8	20	1	ABZ93277	Human oligonucleot	1350	13.8	0.8	17	1	ACD59940	HCV DNazyme substr
c1278	14	0.8	20	1	ABD29507	AA664176-Derived o	c1351	13.8	0.8	17	1	ACD58066	HCV DNazyme substr
c1279	14	0.8	20	1	ADJ34005	Human polo-like ki	c1352	13.8	0.8	17	1	ACC68725	Murine oligonucleo
c1280	14	0.8	20	1	ADJ58295	Human ESM-1 antise	1353	13.8	0.8	17	1	ACC68431	Murine oligonucleo
c1281	14	0.8	20	1	ADL59105	Human ESM-1 antise	c1354	13.8	0.8	17	1	ADB42535	Tumour upregression
c1282	14	0.8	20	1	ADJ58628	Human ESM-1 antise	1355	13.8	0.8	17	1	ADC03574	Human Na/H exchange
c1283	14	0.8	20	1	ADJ58665	Human ESM-1 antise	1356	13.8	0.8	17	1	ADJ48635	Human tumour suppr
c1284	14	0.8	20	1	ADJ58865	Human ESM-1 antise	1357	13.8	0.8	17	1	ADL49556	Human tumour suppr
c1285	14	0.8	20	1	ADL58424	Human ESM-1 antise	c1358	13.8	0.8	17	1	ADL49556	Human tumour suppr
c1286	14	0.8	20	1	ADL58846	Human ESM-1 antise	1359	13.8	0.8	17	1	ADL51894	Human PTGDR substr
c1287	14	0.8	20	1	ADJ58947	Human ESM-1 antise	c1360	13.8	0.8	17	1	ADL47099	Human NCOG recepto
c1288	14	0.8	20	1	ADJ58947	Human ESM-1 antise	1361	13.8	0.8	17	1	ADL47974	Human IKK-gamma su
c1289	14	0.8	20	1	ADJ58947	Human ESM-1 antise	c1362	13.8	0.8	17	1	ADL51895	Human PTGDR substr
c1290	14	0.8	20	1	ADJ58947	Human ESM-1 antise	1363	13.8	0.8	17	1	ADL84328	HCV DNazyme substr
c1291	14	0.8	20	1	AAV08201	PCR primer ABCR-EX	c1364	13.8	0.8	17	1	ADP46413	HCV DNazyme substr
c1292	14	0.8	21	1	AAZ35653	PCR primer used to	1365	13.8	0.8	17	1	ADP46413	HCV DNazyme substr
c1293	14	0.8	21	1	AAZ35653	PCR primer used to	c1366	13.8	0.8	17	1	ADP46413	HCV DNazyme substr
c1294	14	0.8	21	1	AAZ75055	Human interleukin-	1367	13.8	0.8	18	1	AAZ75055	Extend primer 89 u
c1295	14	0.8	21	1	AAH28645	Human interleukin-	c1368	13.8	0.8	18	1	AAZ75055	Human G-alpha-12 a
c1296	14	0.8	21	1	ABL53717	PGK1 PCR primer ov	1369	13.8	0.8	18	1	AAZ75055	Herpes simplex vir
c1297	14	0.8	21	1	ABS57693	S. cerevisiae PGK1	c1370	13.8	0.8	18	1	AAZ75055	CMV antisense olig
c1298	14	0.8	21	1	ADD14266	Human src biomarke	1371	13.8	0.8	18	1	AAZ75055	Peptide nucleic ac
c1299	14	0.8	21	1	ACH00878	L monocytogenes Ct	c1372	13.8	0.8	18	1	AAZ75055	Mouse fik-1 VEGF r
c1300	14	0.8	21	1	ADG88807	Human bpa specific	1373	13.8	0.8	18	1	AAZ75055	Primer 1, located
c1301	14	0.8	21	1	ADJ13969	Human bpa specific	c1374	13.8	0.8	18	1	AAZ75055	MHC class II Ea pr
c1302	14	0.8	21	1	ADJ14006	Human DNA probe us	1375	13.8	0.8	18	1	AAZ75055	Anti-CMV oligonucle
c1303	14	0.8	21	1	ADL16586	Human DNA probe us	c1376	13.8	0.8	18	1	AAZ75055	Human G-alpha-11 p
c1304	14	0.8	21	1	ADM48723	Human heparanase 5	1377	13.8	0.8	18	1	AAZ75055	Human IKK-Beta ant
c1305	14	0.8	21	1	ADM69583	Human bpa DNA ampl	c1378	13.8	0.8	18	1	AAZ75055	Human Herg-3 PCR p
c1306	13.8	0.8	17	1	ADP15685	Plant gene polymor	1379	13.8	0.8	18	1	AAZ75055	Human G-alpha-11 p
c1307	13.8	0.8	17	1	AAZ73444	Renal cell carcino	c1380	13.8	0.8	18	1	AAZ75055	PCR primer used to
c1308	13.8	0.8	17	1	AAZ73444	Rat ICAM hammethea	1381	13.8	0.8	18	1	AAZ75055	G-alpha-12 antisense
c1309	13.8	0.8	17	1	AAZ73444	Human c-myb hamme	c1382	13.8	0.8	18	1	AAZ75055	Cdc 2 kinase hamme
c1310	13.8	0.8	17	1	AAZ73444	Human c-myb hamme	1383	13.8	0.8	18	1	AAZ75055	Human G-alpha-12 a
c1311	13.8	0.8	17	1	AAZ73444	Probe #9 for inter	c1384	13.8	0.8	18	1	AAZ75055	Escherichia coli H
c1312	13.8	0.8	17	1	AAZ73444	Human KDR VEGF rec	1385	13.8	0.8	18	1	AAZ75055	Human PDK-1 antisense
c1313	13.8	0.8	17	1	AAZ73444	Integrin subunit b	c1386	13.8	0.8	18	1	AAZ75055	Primer #4. Synthe
c1314	13.8	0.8	17	1	AAZ73444	Human A-Raf substr	1387	13.8	0.8	18	1	AAZ75055	Primer #2. Synthe
c1315	13.8	0.8	17	1	AAZ73444	Human genomic SNP	c1388	13.8	0.8	18	1	AAZ75055	Oat Beta-amylin sy
c1316	13.8	0.8	17	1	AAZ73444	Mouse angiotensin	1389	13.8	0.8	18	1	AAZ75055	Human atoferlin ex
c1317	13.8	0.8	17	1	ABN10018	Mutant capture oli	c1390	13.8	0.8	18	1	AAZ75055	Caspase-6 protease
c1318	13.8	0.8	17	1	ABN08053	Human GDMPL-1 17-m	1391	13.8	0.8	18	1	AAZ75055	Cdc 2 Kinase hamme
c1319	13.8	0.8	17	1	ABN06804	Human GDMPL-1 17-m	c1392	13.8	0.8	18	1	AAZ75055	Human clone WA15.1
c1320	13.8	0.8	17	1	ABN01534	Human GDMPL-1 17-m	1393	13.8	0.8	18	1	AAZ75055	Human cystatin C'd
c1321	13.8	0.8	17	1	ABN10672	Human GDMPL-1 17-m	c1394	13.8	0.8	18	1	AAZ75055	Chlorinated ethyle
c1322	13.8	0.8	17	1	ABQ63455	Human GDMPL-1 17-m	1395	13.8	0.8	18	1	AAZ75055	Human TGF-beta bin
c1323	13.8	0.8	17	1	ABK18593	Human KTM1a porti	c1396	13.8	0.8	18	1	AAZ75055	Human TGF-beta bin
c1324	13.8	0.8	17	1	ABK18593	Human KTM1a porti	1397	13.8	0.8	18	1	AAZ75055	Human inhibitor-ka
c1325	13.8	0.8	17	1	ABK18593	Human ERG G-cleave	c1398	13.8	0.8	18	1	AAZ75055	Beer spoilage-asso
c1326	13.8	0.8	17	1	ABK18593	Human ERG DNazyme	1399	13.8	0.8	18	1	AAZ75055	HLA class I allele
c1327	13.8	0.8	17	1	ABK18593	Human ERG DNazyme	c1400	13.8	0.8	18	1	AAZ75055	Apolipoprotein E (
c1328	13.8	0.8	17	1	ABV89395	Human PAPP-Ea asso	1401	13.8	0.8	18	1	AAZ75055	SNP-containing car
c1329	13.8	0.8	17	1	ABV89395	Human PAPP-Ea asso	c1402	13.8	0.8	18	1	AAZ75055	HLA locus-specific
c1330	13.8	0.8	17	1	ABV91270	Human POSHL1 scann	1403	13.8	0.8	18	1	AAZ75055	Rubellimicrobium
c1331	13.8	0.8	17	1	ABK56437	Human POSHL1 scann	c1404	13.8	0.8	18	1	AAZ75055	CMV antisense olig
c1332	13.8	0.8	17	1	ABK56437	Human POSHL1 scann	1405	13.8	0.8	18	1	AAZ75055	Peptide nucleic ac
c1333	13.8	0.8	17	1	ABK56437	Human POSHL1 scann	c1406	13.8	0.8	18	1	AAZ75055	PCR primer DP17 fo
c1334	13.8	0.8	17	1	ACN06742	Human CLCA1 gene e	1407	13.8	0.8	18	1	AAZ75055	Human biallelic po
c1335	13.8	0.8	17	1	ACN10397	Human CLCA1 gene e	c1408	13.8	0.8	18	1	AAZ75055	H. capsulatum rRNA
c1336	13.8	0.8	17	1	ACN05558	WNV minus strand I	1409	13.8	0.8	18	1	AAZ75055	Anti-CMV oligonucle
c1337	13.8	0.8	17	1	ACN05558	WNV minus strand I	c1410	13.8	0.8	18	1	AAZ75055	PCR primer Tna4R u
c1338	13.8	0.8	17	1	ACN05558	WNV minus strand I	1411	13.8	0.8	18	1	AAZ75055	Probe hybridising
c1339	13.8	0.8	17	1	ACN10758	WNV minus strand I	c1412	13.8	0.8	18	1	AAZ75055	cdk1 ribozyme bind
c1340	13.8	0.8	17	1	ACN12120	WNV minus strand I	1413	13.8	0.8	18	1	AAZ75055	cdk4 ribozyme bind
c1341	13.8	0.8	17	1	ACN10395	WNV minus strand I	c1414	13.8	0.8	18	1	AAZ75055	cdk3 ribozyme bind
c1342	13.8	0.8	17	1	ACN10396	WNV minus strand I	1415	13.8	0.8	18	1	AAZ75055	Cyclin D3 ribozyme
c1343	13.8	0.8	17	1	ACN10409	WNV minus strand I	c1416	13.8	0.8	18	1	AAZ75055	cdk6 ribozyme bind
c1344	13.8	0.8	17	1	ACN01673	WNV inozyme substr	1417	13.8	0.8	18	1	AAZ75055	cdk3 ribozyme bind
c1345	13.8	0.8	17	1	ACN06741	WNV Ambertzyme subs	c1418	13.8	0.8	18	1	AAZ75055	cdk2 ribozyme bind
c1346	13.8	0.8	17	1	ACN13435	WNV Ambertzyme subs	1419	13.8	0.8	18	1	AAZ75055	cdk3 ribozyme bind
c1347	13.8	0.8	17	1	ABZ59905	Human MD27 scannin	c1420	13.8	0.8	18	1	AAZ75055	Human multi drug r
c1348	13.8	0.8	17	1	ABZ59905	Human K-Ras DNazym	1421	13.8	0.8	18	1	AAZ75055	Human multi drug r
c1349	13.8	0.8	17	1	ABZ59905	Human K-Ras DNazym	c1422	13.8	0.8	18	1	AAZ75055	Cell-cycle depende
c1350	13.8	0.8	17	1	ABZ59905	Human K-Ras DNazym	1423	13.8	0.8	18	1	AAZ75055	Cyclin D3 ribozyme

c1129	14.2	0.8	20	1	ADJ22655	Human endothelial	c1202	14.2	0.8	21	1	ABS97587	Human epoxide hydr
c1130	14.2	0.8	20	1	ADJ22405	Human endothelial	1203	14.2	0.8	21	1	ABK16378	Human adipose prot
c1131	14.2	0.8	20	1	ADJ22405	Human endothelial	c1204	14.2	0.8	21	1	ABK16377	Human adipose prot
c1132	14.2	0.8	20	1	ADJ25452	Human endothelial	1205	14.2	0.8	21	1	ABL61474	Human UGT1A7 codon
c1133	14.2	0.8	20	1	ADK73941	Chimeric phosphoro	c1206	14.2	0.8	21	1	ABX04548	Mouse adipose comp
c1134	14.2	0.8	20	1	ADK74219	Chimeric phosphoro	c1207	14.2	0.8	21	1	ACD26013	Mouse adipose recep
c1135	14.2	0.8	20	1	ADL00908	Human VEGF co-regu	1208	14.2	0.8	21	1	ACD25911	Mouse tryptase-lik
c1136	14.2	0.8	20	1	ADL00949	Human VEGF co-regu	c1209	14.2	0.8	21	1	ADC01969	Human zsig37 cDNA
c1137	14.2	0.8	20	1	ADN42701	Human NOVA2a/b RQ	1210	14.2	0.8	21	1	ADC17380	Mouse serine prote
c1138	14.2	0.8	20	1	ADN06167	Human SP2 specif	c1211	14.2	0.8	21	1	ADC55914	ZC18687 oligo used
c1139	14.2	0.8	20	1	ADL34826	Antisense oligonuc	c1212	14.2	0.8	21	1	ADD14411	Mouse src biomarke
c1140	14.2	0.8	20	1	ADL34964	Murine PPAR-delta	c1213	14.2	0.8	21	1	ADC84418	Hpv detection meth
c1141	14.2	0.8	20	1	ADN48410	Rat Jun N-terminal	c1214	14.2	0.8	21	1	ADF44292	HPV PCR primer GAP
c1142	14.2	0.8	20	1	ADM14468	Human mPES-1 chim	c1215	14.2	0.8	21	1	ADF18039	Mouse zsig37 seque
c1143	14.2	0.8	20	1	ADM14758	Human mPES-1 chim	1216	14.2	0.8	21	1	ADJ37408	Tumour therapy ass
c1144	14.2	0.8	20	1	ADM15006	Human mPES-1 chim	c1217	14.2	0.8	21	1	ACX99015	Human AAGA SNP ana
c1145	14.2	0.8	20	1	ADO56089	Cyclin-dependent k	c1218	14.2	0.8	21	1	ACD02587	Mouse zsig37 ortho
c1146	14.2	0.8	20	1	ADO56156	Cyclin-dependent k	c1219	14.2	0.8	21	1	ADM47388	NOVX oligonucleoti
c1147	14.2	0.8	20	1	ADO56090	Cyclin-dependent k	1220	14.2	0.8	21	1	ADG68332	Human PRO polypept
c1148	14.2	0.8	20	1	ADN03067	Human PIM-1 DNA an	1221	14.2	0.8	21	1	ADK98272	Primer of the inve
c1149	14.2	0.8	20	1	ADN03134	Human PIM-1 DNA an	c1222	14.2	0.8	21	1	ADK96935	Primer of the inve
c1150	14.2	0.8	20	1	ADN61576	Fungi, oomycete an	c1223	14.2	0.8	21	1	ADJ96243	Primer ZC18687 use
c1151	14.2	0.8	20	1	ADN61577	Fungi, oomycete an	c1224	14.2	0.8	21	1	ADM94143	tCRD gene related
c1152	14.2	0.8	20	1	ADP76544	Chimeric phosphoro	1225	14	0.8	15	1	AAF50620	Human rALA hamperh
c1153	14.2	0.8	20	1	ADP76350	Chimeric phosphoro	1226	14	0.8	15	1	AAF50616	IGF-I oligonucleot
c1154	14.2	0.8	20	1	AD044487	4F2 gene measuring	1227	14	0.8	15	1	ABX04015	Resistance genes m
c1155	14.2	0.8	20	1	AD032972	Antisense 2'-MOE g	c1228	14	0.8	15	1	ADM76115	NEPHA gene transcr
c1156	14.2	0.8	20	1	AD032680	Antisense 2'-MOE g	1229	14	0.8	15	1	ADM76115	Mouse fit-1 VEGF r
c1157	14.2	0.8	20	1	ADP82137	Human apolipoprote	1230	14	0.8	17	1	AAV97497	Human KDR VEGF rec
c1158	14.2	0.8	20	1	ADO23289	Nucleic acid ampli	1231	14	0.8	17	1	AAV74928	Mouse fit-1 VEGF r
c1159	14.2	0.8	20	1	ADO23287	Rev PCR primer use	1232	14	0.8	17	1	AAV74911	Mouse fit-1 VEGF r
c1160	14.2	0.8	20	1	ADP84331	Enzymatic RNA mole	1233	14	0.8	17	1	AAV74927	Human EGF-R target
c1161	14.2	0.8	20	1	AAQ51806	Primer derived fro	c1234	14	0.8	17	1	AAV97497	Human EGF-R target
c1162	14.2	0.8	21	1	AAQ57291	Canine disease mar	1235	14	0.8	17	1	AAV97497	Human EGF-R target
c1163	14.2	0.8	21	1	AAT42247	Zea mays genome re	1236	14	0.8	17	1	ABK02332	Human Nogo Ambrzy
c1164	14.2	0.8	21	1	ADG77662	Zea mays genome re	1237	14	0.8	17	1	ABK01785	Human Nogo Inozyme
c1165	14.2	0.8	21	1	AAV51809	Human biallelic po	1238	14	0.8	17	1	ABK00760	Human Nogo Inozyme
c1166	14.2	0.8	21	1	AAV51812	Human biallelic po	c1239	14	0.8	17	1	ABL46440	Human GRID hamperh
c1167	14.2	0.8	21	1	AAQ09125	PCR primer ABCR.EX	1240	14	0.8	17	1	ABL46441	Human GRID hamperh
c1168	14.2	0.8	21	1	AAV08249	L monocytogenes hl	c1241	14	0.8	17	1	ABL46442	Human GRID hamperh
c1169	14.2	0.8	21	1	AAV62007	Human polymorphic	1242	14	0.8	17	1	ABS75015	Human PAPP-Ea asso
c1170	14.2	0.8	21	1	AAZ36124	Human polymorphic	1243	14	0.8	17	1	ABS75016	Human PAPP-Ea asso
c1171	14.2	0.8	21	1	AAZ36242	Human polymorphic	1244	14	0.8	17	1	AAZ46160	3900 PCR primer, t
c1172	14.2	0.8	21	1	AAZ26102	Human polymorphic	1245	14	0.8	17	1	ABT36202	Tumour suppression
c1173	14.2	0.8	21	1	AAZ17882	Anti-CMV oligonuc	1246	14	0.8	17	1	ABZ61324	NFKB sub-unit modu
c1174	14.2	0.8	21	1	AAZ07030	Human integrin bet	c1247	14	0.8	17	1	ABZ61324	Human H-Ras DNazym
c1175	14.2	0.8	21	1	AAZ59350	Human STR2 gene pr	1248	14	0.8	17	1	ABZ61324	Human H-Ras DNazym
c1176	14.2	0.8	21	1	AAZ73744	Human biallelic ma	1249	14	0.8	17	1	ACF82527	Cancer based on Cy
c1177	14.2	0.8	21	1	AAZ56234	Mutated Influenza	1250	14	0.8	17	1	ACF82527	MRP1 based cancer
c1178	14.2	0.8	21	1	AAZ56234	Human gene single	1251	14	0.8	17	1	ADB88287	Human UGT1A1 varia
c1179	14.2	0.8	21	1	AAZ56234	Human gene single	1252	14	0.8	17	1	ADB88287	Human MDR1 variant
c1180	14.2	0.8	21	1	AAZ56234	Human gene single	1253	14	0.8	17	1	ADB92461	Human MDR1 variant
c1181	14.2	0.8	21	1	AAZ56234	Human gene single	c1254	14	0.8	17	1	ADM53798	Human GRID mRNA su
c1182	14.2	0.8	21	1	AAH62348	ATF3 polymorphism	c1255	14	0.8	17	1	ADM53799	Human GRID mRNA su
c1183	14.2	0.8	21	1	AAH62637	Opiate receptor li	c1256	14	0.8	17	1	ADM53800	Human GRID mRNA su
c1184	14.2	0.8	21	1	AAH62637	Marine tyrosyl codi	1257	14	0.8	18	1	AAZ41054	Human KDR VEGF rec
c1185	14.2	0.8	21	1	AAH62637	PCR primer for UDP	1258	14	0.8	18	1	AAZ41054	Human ELK-1 phosph
c1186	14.2	0.8	21	1	AAH62637	Human RecQ5 type D	1259	14	0.8	18	1	AAZ41054	Human ELK-1 expressi
c1187	14.2	0.8	21	1	AAH62637	Critical sequence	1260	14	0.8	18	1	AAZ41054	Human ELK-1 PCR pr
c1188	14.2	0.8	21	1	AAH62637	Mus musculus goose	1261	14	0.8	18	1	AAZ41054	Human ELK-1 PCR pr
c1189	14.2	0.8	21	1	AAH62637	Human single nucle	1262	14	0.8	18	1	AAZ41054	Primer oligo used
c1190	14.2	0.8	21	1	AAH62637	Human single nucle	1263	14	0.8	19	1	AAZ41054	Human adult thymus
c1191	14.2	0.8	21	1	AAH62637	Forward PCR primer	1264	14	0.8	19	1	AAZ41054	cdk2 ribozyme bind
c1192	14.2	0.8	21	1	AAH62637	Human polymorphism	1265	14	0.8	19	1	AAH57779	Cell-cycle depende
c1193	14.2	0.8	21	1	AAH62637	Human polymorphism	c1266	14	0.8	19	1	ADF37430	Human VEGFR3 short
c1194	14.2	0.8	21	1	AAH62637	Human polymorphism	c1267	14	0.8	19	1	ADF37430	Human VEGFR3 short
c1195	14.2	0.8	21	1	AAH62637	Human polymorphism	1268	14	0.8	19	1	ADF70750	Hepatitis B virus
c1196	14.2	0.8	21	1	AAH62637	Human aquaporin 5	c1269	14	0.8	20	1	AAZ80149	Clostridium histol
c1197	14.2	0.8	21	1	AAH62637	Human aquaporin 5	c1270	14	0.8	20	1	AAZ80149	Human alpha-2BAR g
c1198	14.2	0.8	21	1	AAH62637	Human aquaporin 5	1271	14	0.8	20	1	AAZ80149	Human catenin-bind
c1199	14.2	0.8	21	1	AAH62637	Human aquaporin 5	1272	14	0.8	20	1	AAZ80149	Human catenin-bind
c1200	14.2	0.8	21	1	AAH62637	Human chromosome 1	1273	14	0.8	20	1	AAZ80149	Human ANC 2H01 CDN
c1201	14.2	0.8	21	1	AAH62637	Rat metallothionei	1274	14	0.8	20	1	AAZ80149	Human ANC_2H01 CDN

c 983	14.2	0.8	20	1	AAZ03102	PCR primer used to	1056	14.2	0.8	20	1	AAZ52299	Human IFNGR2 antis
c 984	14.2	0.8	20	1	AAZ05087	PCR primer used to	c1057	14.2	0.8	20	1	AAZ55498	Human FGFR-3 antis
c 985	14.2	0.8	20	1	AAZ030873	PCR primer used to	c1058	14.2	0.8	20	1	AAZ55617	Fungal universal I
c 986	14.2	0.8	20	1	AAZ04109	PCR primer used to	c1059	14.2	0.8	20	1	ABX33731	PCR primer #14 for
c 987	14.2	0.8	20	1	AAZ06548	Oligonucleotide pr	c1060	14.2	0.8	20	1	ACC47147	Nucleotide sequenc
c 988	14.2	0.8	20	1	AAZ06549	Oligonucleotide pr	c1061	14.2	0.8	20	1	AAZ62456	Human ABC transpor
c 989	14.2	0.8	20	1	AAZ89549	PCR primer trqb fo	c1062	14.2	0.8	20	1	AAZ60972	Human MyD88 antis
c 990	14.2	0.8	20	1	AAZ23562	Deletion sequence	c1063	14.2	0.8	20	1	ADC36216	Weed controller me
c 991	14.2	0.8	20	1	AAZ96453	PCR primer used to	c1064	14.2	0.8	20	1	ADC35560	Human CD81/TAPA-1
c 992	14.2	0.8	20	1	AAZ27102	PCR primer for Candida	c1065	14.2	0.8	20	1	ADP62975	Human PTTG1 antis
c 993	14.2	0.8	20	1	AAZ22586	Primer for #2 for	c1066	14.2	0.8	20	1	ADP88196	Single nucleotide
c 994	14.2	0.8	20	1	AAZ29421	Rat JNK1-specific	c1067	14.2	0.8	20	1	ADP90989	Microorganism dete
c 995	14.2	0.8	20	1	AAZ13128	P13K antisense inh	c1068	14.2	0.8	20	1	ADP93135	Human oligonucleot
c 996	14.2	0.8	20	1	AAZ07709	Human collectin se	c1069	14.2	0.8	20	1	ABZ85058	Human oligonucleot
c 997	14.2	0.8	20	1	AAZ95024	Prostate cancer di	c1070	14.2	0.8	20	1	ABZ85420	Human oligonucleot
c 998	14.2	0.8	20	1	AAZ40718	Primer for sequenc	c1071	14.2	0.8	20	1	ABZ85267	Human oligonucleot
c 999	14.2	0.8	20	1	AAZ72227	Human biallelic ma	c1072	14.2	0.8	20	1	ABZ84777	Human oligonucleot
c1000	14.2	0.8	20	1	AAZ29697	CC92 heavy chain o	c1073	14.2	0.8	20	1	ABZ87947	Human oligonucleot
c1001	14.2	0.8	20	1	AAZ29714	VhalphatAG oligonu	c1074	14.2	0.8	20	1	ABZ87022	Human oligonucleot
c1002	14.2	0.8	20	1	AAZ72056	Japanese citrus vi	c1075	14.2	0.8	20	1	ABZ88149	Human oligonucleot
c1003	14.2	0.8	20	1	AAZ62964	JNK antisense olig	c1076	14.2	0.8	20	1	ABZ87509	Human oligonucleot
c1004	14.2	0.8	20	1	AAZ94772	PCR primer ITS3 us	c1077	14.2	0.8	20	1	ABV77015	Primer ITS3 used t
c1005	14.2	0.8	20	1	AAZ94773	Single nucleotide	c1078	14.2	0.8	20	1	ABV77014	Primer ITS3 used t
c1006	14.2	0.8	20	1	AAZ72311	Single nucleotide	c1079	14.2	0.8	20	1	ACA61050	Guignardia interna
c1007	14.2	0.8	20	1	AAZ72320	3' primer used to	c1080	14.2	0.8	20	1	ACA61051	Guignardia interna
c1008	14.2	0.8	20	1	AAZ72296	Mouse immunoglobul	c1081	14.2	0.8	20	1	ABZ21316	PCR primer for the
c1009	14.2	0.8	20	1	AAZ72296	Oligonucleotide #6	c1082	14.2	0.8	20	1	ADK66856	Mouse B72.3/CC92 a
c1010	14.2	0.8	20	1	AAZ90638	Guar and locust be	c1083	14.2	0.8	20	1	ADK66836	Mouse B72.3/CC92 a
c1011	14.2	0.8	20	1	AAZ44593	Guar and locust be	c1084	14.2	0.8	20	1	ADK24379	Human calmodulin 2
c1012	14.2	0.8	20	1	AAZ03547	Internal transcrib	c1085	14.2	0.8	20	1	ABD21007	Human transglutami
c1013	14.2	0.8	20	1	AAH44591	Internal transcrib	c1086	14.2	0.8	20	1	ABD21007	Human transglutami
c1014	14.2	0.8	20	1	AAH44591	Universal fungal i	c1087	14.2	0.8	20	1	ABD21007	Human transglutami
c1015	14.2	0.8	20	1	AAZ08396	Human interferon r	c1088	14.2	0.8	20	1	ABD21007	Human transglutami
c1016	14.2	0.8	20	1	AAZ08397	Human cytohesin-2	c1089	14.2	0.8	20	1	ABD21007	Human transglutami
c1017	14.2	0.8	20	1	AAZ91160	16S/23S rRNA spacer	c1090	14.2	0.8	20	1	ABD21007	Human transglutami
c1018	14.2	0.8	20	1	AAZ91162	Guignardia rRNA ge	c1091	14.2	0.8	20	1	ABD21007	Human transglutami
c1019	14.2	0.8	20	1	AAH46289	Guignardia citrica	c1092	14.2	0.8	20	1	ABD21007	Human transglutami
c1020	14.2	0.8	20	1	AAH46289	Phytophthora infes	c1093	14.2	0.8	20	1	ABD21007	Human transglutami
c1021	14.2	0.8	20	1	AAH69777	Human caspase 2 an	c1094	14.2	0.8	20	1	ADG24473	Human E2-EPF antis
c1022	14.2	0.8	20	1	AAH73769	Mouse RAIDD antis	c1095	14.2	0.8	20	1	ADG24473	Human E2-EPF antis
c1023	14.2	0.8	20	1	ABN85668	Human RNase HII an	c1096	14.2	0.8	20	1	ADG24473	Human E2-EPF antis
c1024	14.2	0.8	20	1	ABN74847	Human RNase HII an	c1097	14.2	0.8	20	1	ADG24473	Human E2-EPF antis
c1025	14.2	0.8	20	1	ABQ75387	Nucleotide sequenc	c1098	14.2	0.8	20	1	ADG24473	Human E2-EPF antis
c1026	14.2	0.8	20	1	ABQ75387	T. tauschii/wheat	c1099	14.2	0.8	20	1	ADG24473	Human E2-EPF antis
c1027	14.2	0.8	20	1	ABQ75387	Oestrogen receptor	c1100	14.2	0.8	20	1	ADG24473	Human E2-EPF antis
c1028	14.2	0.8	20	1	ABL59026	Human calreticulin	c1101	14.2	0.8	20	1	ADG24473	Human E2-EPF antis
c1029	14.2	0.8	20	1	ABQ93219	Human chromosome 1	c1102	14.2	0.8	20	1	ADG24473	Human E2-EPF antis
c1030	14.2	0.8	20	1	ABQ93219	Mutant gamma-amino	c1103	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1031	14.2	0.8	20	1	AAZ99532	TNFRI expression m	c1104	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1032	14.2	0.8	20	1	ABL44407	Myosphaerella spe	c1105	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1033	14.2	0.8	20	1	ABT05202	Mycosphaerella spe	c1106	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1034	14.2	0.8	20	1	ABK27372	Cordyceps PCR prim	c1107	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1035	14.2	0.8	20	1	ABA94547	Cordyceps PCR prim	c1108	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1036	14.2	0.8	20	1	ABA94548	Human E2F transcri	c1109	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1037	14.2	0.8	20	1	ABV78755	Bovine MHC class I	c1110	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1038	14.2	0.8	20	1	ABV78755	Teiomerase reverse	c1111	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1039	14.2	0.8	20	1	AAZ34903	Capture oligonucle	c1112	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1040	14.2	0.8	20	1	AAZ34903	Capture oligonucle	c1113	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1041	14.2	0.8	20	1	AAZ34903	Human ESR1 exon 1G	c1114	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1042	14.2	0.8	20	1	AAZ34903	Phosphorothioate o	c1115	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1043	14.2	0.8	20	1	AAZ34903	Reverse PCR primer	c1116	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1044	14.2	0.8	20	1	ADA44788	Antisense oligonuc	c1117	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1045	14.2	0.8	20	1	ABT34198	Mouse KSR chimeric	c1118	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1051	14.2	0.8	20	1	ACC49703	Human KSR chimeric	c1119	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1052	14.2	0.8	20	1	ACC50005	Oligonucleotide pr	c1120	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1053	14.2	0.8	20	1	ACC50004	Oligonucleotide pr	c1121	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1054	14.2	0.8	20	1	ABV99905	Streptococcus ther	c1122	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
c1055	14.2	0.8	20	1	ABZ59526	Mouse src-c chimera	c1123	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
	14.2	0.8	20	1	ADA26668	Rat Jun N-terminal	c1124	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
	14.2	0.8	20	1			c1125	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
	14.2	0.8	20	1			c1126	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
	14.2	0.8	20	1			c1127	14.2	0.8	20	1	ADH18431	Mouse PPAR antis
	14.2	0.8	20	1			c1128	14.2	0.8	20	1	ADH18431	Mouse PPAR antis

C 837	14.4	0.8	21	1	ACA58076	Human familial bip	910	14.2	0.8	19	1	ADB92574	Human MDRI variant
C 838	14.4	0.8	21	1	ADU13573	Human DNA probe us	911	14.2	0.8	19	1	AD29746	Mitogen activated
C 839	14.4	0.8	21	1	ADU13935	Human DNA probe us	C 912	14.2	0.8	19	1	AD29851	Mitogen activated
C 840	14.4	0.8	21	1	ADU13972	Human DNA probe us	C 913	14.2	0.8	19	1	AD29841	Mitogen activated
C 841	14.4	0.8	21	1	ADU13975	Human DNA probe us	C 914	14.2	0.8	19	1	AD29736	Mitogen activated
C 842	14.4	0.8	21	1	ADU13976	Human DNA probe us	C 915	14.2	0.8	19	1	AD29735	Mitogen activated
C 843	14.4	0.8	21	1	ADU13938	Human DNA probe us	C 916	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 844	14.4	0.8	21	1	ADK95204	Primer of the inve	C 917	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 845	14.4	0.8	21	1	ADK97027	Primer of the inve	C 918	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 846	14.4	0.8	21	1	AA978558	PCR primer 7 for D	C 919	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 847	14.4	0.8	22	1	AA978558	Human biallelic po	C 920	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 848	14.4	0.8	22	1	AA978558	Reverse primer for	C 921	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 849	14.4	0.8	22	1	AA978558	Human papilloma vi	C 922	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 850	14.4	0.8	22	1	AA978558	Outer reverse PCR	C 923	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 851	14.4	0.8	22	1	ACC82981	Rat CLCA1 gene PCR	C 924	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 852	14.4	0.8	22	1	ADH28100	Human chromosome 1	C 925	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 853	14.4	0.8	22	1	ADH28100	Rat CLCA1 Ri- PCR	C 926	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 854	14.4	0.8	22	1	ADH28100	Antisense compound	C 927	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 855	14.4	0.8	22	1	ADH28100	Mouse kank (mkank)	C 928	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 856	14.4	0.8	22	1	ADH28100	CMV antisense olig	C 929	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 857	14.2	0.8	19	1	AA711971	CMV antisense olig	C 930	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 858	14.2	0.8	19	1	AA711971	Peptide nucleic ac	C 931	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 859	14.2	0.8	19	1	AA711971	Simple tandem repe	C 932	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 860	14.2	0.8	19	1	AA711971	Peptide nucleic ac	C 933	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 861	14.2	0.8	19	1	AA711971	Human cytochrome p	C 934	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 862	14.2	0.8	19	1	AA711971	Primer TEL.114U19	C 935	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 863	14.2	0.8	19	1	AA711971	lacZ-specific prim	C 936	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 864	14.2	0.8	19	1	AA711971	Anti-CMV oligonuc	C 937	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 865	14.2	0.8	19	1	AA711971	Anti-CMV oligonuc	C 938	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 866	14.2	0.8	19	1	AA711971	cdk2 ribozyme bind	C 939	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 867	14.2	0.8	19	1	AA711971	cdk2 ribozyme bind	C 940	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 868	14.2	0.8	19	1	AA711971	cdk4 ribozyme bind	C 941	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 869	14.2	0.8	19	1	AA711971	cdk7 ribozyme bind	C 942	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 870	14.2	0.8	19	1	AA711971	cdk3 ribozyme bind	C 943	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 871	14.2	0.8	19	1	AA711971	cdk6 ribozyme bind	C 944	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 872	14.2	0.8	19	1	AA711971	cdk2 ribozyme bind	C 945	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 873	14.2	0.8	19	1	AA711971	cdk2 ribozyme bind	C 946	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 874	14.2	0.8	19	1	AA711971	cdk2 ribozyme bind	C 947	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 875	14.2	0.8	19	1	AA711971	cdk7 ribozyme bind	C 948	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 876	14.2	0.8	19	1	AA711971	Primer 1 used in t	C 949	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 877	14.2	0.8	19	1	AA711971	PCR primer specifi	C 950	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 878	14.2	0.8	19	1	AA711971	Human multi drug r	C 951	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 879	14.2	0.8	19	1	AA711971	Cell-cycle depende	C 952	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 880	14.2	0.8	19	1	AA711971	Cell-cycle depende	C 953	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 881	14.2	0.8	19	1	AA711971	Cell-cycle depende	C 954	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 882	14.2	0.8	19	1	AA711971	Cell-cycle depende	C 955	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 883	14.2	0.8	19	1	AA711971	Cell-cycle depende	C 956	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 884	14.2	0.8	19	1	AA711971	Cell-cycle depende	C 957	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 885	14.2	0.8	19	1	AA711971	Cell-cycle depende	C 958	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 886	14.2	0.8	19	1	AA711971	Cell-cycle depende	C 959	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 887	14.2	0.8	19	1	AA711971	Cell-cycle depende	C 960	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 888	14.2	0.8	19	1	AA711971	Cell-cycle depende	C 961	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 889	14.2	0.8	19	1	AA711971	Cell-cycle depende	C 962	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 890	14.2	0.8	19	1	AA711971	Cell-cycle depende	C 963	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 891	14.2	0.8	19	1	AA711971	HIV-1 related bind	C 964	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 892	14.2	0.8	19	1	AA711971	HIV-1 related bind	C 965	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 893	14.2	0.8	19	1	AA711971	HIV-1 related bind	C 966	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 894	14.2	0.8	19	1	AA711971	HIV-1 related bind	C 967	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 895	14.2	0.8	19	1	AA711971	Rabbit skeletal mu	C 968	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 896	14.2	0.8	19	1	AA711971	Mucor circinelloid	C 969	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 897	14.2	0.8	19	1	AA711971	Human serotonin 1B	C 970	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 898	14.2	0.8	19	1	AA711971	Multiplex group PC	C 971	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 899	14.2	0.8	19	1	AA711971	Human IFNa2 specifi	C 972	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 900	14.2	0.8	19	1	AA711971	Cancer based on CY	C 973	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 901	14.2	0.8	19	1	AA711971	Cancer based on CY	C 974	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 902	14.2	0.8	19	1	AA711971	MRP1 based cancer	C 975	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 903	14.2	0.8	19	1	AA711971	MRP1 based cancer	C 976	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 904	14.2	0.8	19	1	AA711971	Acute lymphoblasti	C 977	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 905	14.2	0.8	19	1	AA711971	Human latrophilin 3	C 978	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 906	14.2	0.8	19	1	AA711971	Human UGT1A1 varia	C 979	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 907	14.2	0.8	19	1	AA711971	Human UGT1A1 varia	C 980	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 908	14.2	0.8	19	1	AA711971	Human MDRI variant	C 981	14.2	0.8	19	1	AD29840	Human VEGFR3 short
C 909	14.2	0.8	19	1	AA711971	Human MDRI variant	C 982	14.2	0.8	19	1	AD29840	Human VEGFR3 short

691	14.6	0.8	22	1	ACC80005	Human HDAC9 exon 4	764	14.4	0.8	19	1	AAZ57154	Phosphorothioate 1
c 692	14.6	0.8	22	1	ADA00216	Mouse and human mi	c 765	14.4	0.8	19	1	AAF80370	PCR primer for ost
693	14.6	0.8	22	1	ABX17615	RTQ-PCR primer #1	766	14.4	0.8	19	1	AAH57920	Cell-cycle depende
694	14.6	0.8	22	1	ADC26573	PCR primer PI used	767	14.4	0.8	19	1	ADA25683	Human REL-A short
695	14.6	0.8	22	1	ADD72131	Human NOV1 RTQ PCR	c 768	14.4	0.8	19	1	ADA26032	Human REL-A short
696	14.6	0.8	22	1	ADD72152	Human NOV2 RTQ PCR	c 769	14.4	0.8	19	1	ADF71314	Protein tyrosine p
697	14.6	0.8	22	1	ADD72164	Human NOV2 RTQ PCR	c 770	14.4	0.8	19	1	ADF71240	Protein tyrosine p
698	14.6	0.8	22	1	ADD72146	Human NOV1 RTQ PCR	c 771	14.4	0.8	19	1	ADF71240	TNF alpha PCR prim
699	14.6	0.8	22	1	ADM31242	Human apolipoprote	c 772	14.4	0.8	19	1	AAI51775	TNF PDGFR-target
700	14.6	0.8	22	1	ADH42887	Novel human nuclei	c 773	14.4	0.8	19	1	ADAI4642	Human PDGFR-target
701	14.6	0.8	22	1	ADI19085	Rat DRP DNA ampli	c 774	14.4	0.8	19	1	ADAI4953	TNF-alpha mRNA qua
c 702	14.6	0.8	22	1	ADK96694	Primer of the inve	c 775	14.4	0.8	19	1	ADP67060	Rat matrix metallo
c 703	14.6	0.8	22	1	ADP84297	PCR primer JRGElF2	c 776	14.4	0.8	19	1	ADP27088	tdh 4. Synthetic.
704	14.4	0.8	16	1	ADD00034	Stage 2 MSP primer	c 777	14.4	0.8	20	1	AAQ30930	PCR primer-b to am
c 705	14.4	0.8	17	1	AAQ78692	DNA primer for hum	c 778	14.4	0.8	20	1	AAQ42491	Vibrio parahaemoly
c 706	14.4	0.8	17	1	AAT10550	Human IGA membrane	c 779	14.4	0.8	20	1	AAQ46094	Oligonucleotide us
c 707	14.4	0.8	17	1	AAV94784	Human IL-2 recepto	c 780	14.4	0.8	20	1	AAQ46096	PCR primer used fo
c 708	14.4	0.8	17	1	AAT85453	Membrane extracell	c 781	14.4	0.8	20	1	AAQ68498	Vibrio parahaemoly
c 709	14.4	0.8	17	1	ABK03441	Human CD20 G-cleav	c 782	14.4	0.8	20	1	AAQ60442	Tyrosine kinase Tn
c 710	14.4	0.8	17	1	ABA80084	HBA2 mutation corr	c 783	14.4	0.8	20	1	AAT85490	Oligo #2 used to i
c 711	14.4	0.8	17	1	ABA80085	HBA2 mutation corr	c 784	14.4	0.8	20	1	AAT92765	Primer #2 for immu
c 712	14.4	0.8	17	1	AAC83038	Primer #3 used to	c 785	14.4	0.8	20	1	AAV10122	Human biallelic p
c 713	14.4	0.8	17	1	AAV91027	Human multi drug r	c 786	14.4	0.8	20	1	AAV16342	3' RACE internal p
c 714	14.4	0.8	17	1	ABV78818	Human HTPL scannin	c 787	14.4	0.8	20	1	AAV29622	Human Ep3 receptor
c 715	14.4	0.8	17	1	ABV78817	Human ERG DNzyme	c 788	14.4	0.8	20	1	AAV52762	Immunoglobulin kap
716	14.4	0.8	17	1	ABK18807	Human ERG hammerhe	c 789	14.4	0.8	20	1	AAV29918	Primer 1192-1161 f
717	14.4	0.8	17	1	ABK17468	Human ERG hammerhe	c 790	14.4	0.8	20	1	AAV29949	Primer 1192-1161 f
718	14.4	0.8	17	1	ABK18069	Human ERG hammerhe	c 791	14.4	0.8	20	1	AAA79747	Hepatitis B virus
719	14.4	0.8	17	1	ABK19256	Human ERG hammerhe	c 792	14.4	0.8	20	1	AAAC09925	Human E2f transcri
720	14.4	0.8	17	1	ABS75017	Human PAPP-Ea asso	c 793	14.4	0.8	20	1	AAAC67141	V parahaemolyticus
721	14.4	0.8	17	1	ABS75017	Human PAPP-Ea asso	c 794	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
722	14.4	0.8	17	1	ABS75239	Human CLCA1 gene e	c 795	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
723	14.4	0.8	17	1	ABK57624	Human CLCA1 gene e	c 796	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
724	14.4	0.8	17	1	ABK56596	Human CLCA1 gene e	c 797	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
725	14.4	0.8	17	1	ABK57560	Human CLCA1 gene e	c 798	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
726	14.4	0.8	17	1	ACN10394	WNV minus strand I	c 799	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 727	14.4	0.8	17	1	ACN14092	WNV minus strand D	c 800	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 728	14.4	0.8	17	1	ACN04335	WNV Zinzyme substr	c 801	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 729	14.4	0.8	17	1	ACN06743	WNV Zinzyme substr	c 802	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
730	14.4	0.8	17	1	ACN03647	WNV Zinzyme substr	c 803	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
731	14.4	0.8	17	1	ABT34610	Tumour suppression	c 804	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
732	14.4	0.8	17	1	ABZ64792	Human HER2 DNzyme	c 805	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 733	14.4	0.8	17	1	ABZ60189	Human K-Ras DNzyme	c 806	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
734	14.4	0.8	17	1	ACC74114	Human CYP2D6 targe	c 807	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 735	14.4	0.8	17	1	ACC74113	Human CYP2D6 targe	c 808	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 736	14.4	0.8	17	1	ADL47940	Human IKK-gamma su	c 809	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 737	14.4	0.8	17	1	ADH70706	Human Vbeta gene r	c 810	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 738	14.4	0.8	17	1	AAV05962	Oligonucleotide fo	c 811	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 739	14.4	0.8	18	1	AAZ41020	Cellular inhibitor	c 812	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 740	14.4	0.8	18	1	AAZ22114	Human c-IAP-2 mRNA	c 813	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 741	14.4	0.8	18	1	AAZ70710	Human biallelic ma	c 814	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
742	14.4	0.8	18	1	AAD20371	Antisense oligo, I	c 815	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 743	14.4	0.8	18	1	ABQ65383	Human gene methyl	c 816	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 744	14.4	0.8	18	1	ABK34171	Human UNG PCR prim	c 817	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 745	14.4	0.8	18	1	ABK28109	Human UNG methylat	c 818	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
746	14.4	0.8	18	1	AAD41922	Human SRC-1 antise	c 819	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
747	14.4	0.8	18	1	ABZ10908	Haematopoietic cel	c 820	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
748	14.4	0.8	18	1	ADA20557	Prostate tumour re	c 821	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 749	14.4	0.8	18	1	ADA84360	Human UNG PCR prim	c 822	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 750	14.4	0.8	18	1	ABQ80440	Primer: Rat PEPC	c 823	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 751	14.4	0.8	18	1	AAD60490	Human c-IAP-2 anti	c 824	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 752	14.4	0.8	18	1	ADJ58324	Primer of the inve	c 825	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 753	14.4	0.8	18	1	ADH70727	Human Vbeta gene r	c 826	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 754	14.4	0.8	18	1	ADO49036	Labelling molecule	c 827	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 755	14.4	0.8	18	1	ADO26656	Synthetic leader s	c 828	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 756	14.4	0.8	18	1	ADO26656	Synthetic leader s	c 829	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 757	14.4	0.8	18	1	ADO26658	Synthetic leader s	c 830	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 758	14.4	0.8	18	1	ADO26720	Synthetic leader s	c 831	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 759	14.4	0.8	18	1	AAT74921	3'-primer for HLA	c 832	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 760	14.4	0.8	19	1	AAV13329	Sense primer Exon	c 833	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
761	14.4	0.8	19	1	AAA82758	Cdk3 ribozyme bind	c 834	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
762	14.4	0.8	19	1	AAA82758	PCR primer used to	c 835	14.4	0.8	20	1	AAAF58946	V parahaemolyticus
c 763	14.4	0.8	19	1	AAA41782		c 836	14.4	0.8	20	1	AAAF58946	V parahaemolyticus

Phosphorothioate 1
PCR primer for ost
Cell-cycle depende
Human REL-A short
Human REL-A short
Protein tyrosine p
Protein tyrosine p
TNF alpha PCR prim
Human PDGFR-target
Human PDGFR-target
TNF-alpha mRNA qua
Rat matrix metallo
tdh 4. Synthetic.
PCR primer-b to am
Vibrio parahaemoly
Oligonucleotide us
PCR primer used fo
Vibrio parahaemoly
Tyrosine kinase Tn
Oligo #2 used to i
Primer #2 for immu
Human biallelic p
3' RACE internal p
Human Ep3 receptor
Immunoglobulin kap
Primer 1192-1161 f
Primer 1192-1161 f
Hepatitis B virus
Human E2f transcri
V parahaemolyticus
V parahaemolyticus
V parahaemolyticus
Rice promoter spec
Human Nck-2 phosph
V parahaemolyticus
PCR primer KP139.
Primer #13 related
Candida albicans G
Chimeric phosphoro
Capture oligonucle
Mouse TGF-beta rec
Single nucleotide
Human oligonucleot
Human oligonucleot
Human oligonucleot
PCR primer used to
Human myosin X-der
Human transglutami
Human transglutami
Human HGFBRMY41 ge
Human EDG5 antisen
Insulin-like growt
Human mPGES-1 chim
Human mPGES-1 chim
Mouse foxhead box
Farnesoid X recept
Farnesoid X recept
Set 2 left PCR pri
Mouse checkpoint k
Mouse checkpoint k
Mouse forthead box
Human/rat betal-ad
HOXA4 RT-PCR prime
NANBHV primer. Sy
Exon 5 of an RNaC
Human gene single
Frosty forward pri
Human single nucle
A. pullulans xyna
Human multidrug re
Pro-alpha(III) ch
Single nucleotide

C 545	14.8	0.8	18	1	AD017024	Human LIPIN3 exon1	c 618	14.8	0.8	22	1	ABT05572	NOVX reverse PCR p
546	14.8	0.8	19	1	AA82399	cdk6 ribozyme bind	619	14.8	0.8	22	1	ADH49031	NOV18 PCR primer.
547	14.8	0.8	19	1	AA82619	cdk2 ribozyme bind	620	14.8	0.8	22	1	ABX72335	Human NOVX DNA PCR
548	14.8	0.8	19	1	AA84266	Cyclin D1 ribozyme	621	14.8	0.8	22	1	AD15499	Novel human protei
549	14.8	0.8	19	1	AAH58161	Cell-cycle depende	622	14.8	0.8	22	1	ADJ45837	Human fibrosis/scs
550	14.8	0.8	19	1	AAH59428	Cyclin D1 ribozyme	623	14.8	0.8	22	1	ADL71202	PCR primer 2 used
551	14.8	0.8	19	1	AAH57781	Cell-cycle depende	624	14.8	0.8	22	1	ADM56137	Thale cress VIP4 p
552	14.8	0.8	19	1	ADP31689	Human IGF-1R siNA	625	14.8	0.8	22	1	ADK13910	Human methyl-CpG-b
553	14.8	0.8	19	1	ADP31412	Human IGF-1R trans	626	14.8	0.8	22	1	ADK13982	Human methyl-CpG-b
554	14.8	0.8	19	1	ADP85015	Human ERG2-targete	627	14.8	0.8	22	1	AAK80112	Human methyl-CpG-b
555	14.8	0.8	19	1	ADP85191	Human ERG2-targete	628	14.8	0.8	22	1	AAK80112	Reverse primer #24
556	14.8	0.8	19	1	ADP79637	KIAA0783 extend pr	629	14.8	0.8	22	1	AAQ61708	Human CFTR gene up
557	14.8	0.8	20	1	AAV12449	Growth hormone rec	630	14.8	0.8	22	1	AAQ61708	Human CFTR gene up
558	14.8	0.8	20	1	AAV52681	Hepatocyte nuclear	631	14.8	0.8	22	1	AAQ61708	HEV strain BUR-121
559	14.8	0.8	20	1	AAZ01841	PCR primer used to	632	14.8	0.8	22	1	AAQ61708	HEV strain Burma-1
560	14.8	0.8	20	1	AAZ01841	PCR primer used to	633	14.8	0.8	22	1	AAQ61708	HEV ORF proteins e
561	14.8	0.8	20	1	AAZ23550	Deletion sequence	634	14.8	0.8	22	1	AAQ61708	Human ICAM-1, E-se
562	14.8	0.8	20	1	AAZ36936	Human STAT3 phosph	635	14.8	0.8	22	1	AAQ61708	Human polymorphic
563	14.8	0.8	20	1	AAZ36936	Human STAT3 phosph	636	14.8	0.8	22	1	AAQ61708	Human LKb1 gene pr
564	14.8	0.8	20	1	AAZ36936	1,5-anhydroglucito	637	14.8	0.8	22	1	AAQ61708	Tumour necrosis fa
565	14.8	0.8	20	1	AAZ36936	Human NADH ubiquin	638	14.8	0.8	22	1	AAQ61708	HSV-2 ICP6 gene pr
566	14.8	0.8	20	1	AAZ36936	Human STAT3 antise	639	14.8	0.8	22	1	AAQ61708	Human biallelic ma
567	14.8	0.8	20	1	AAZ36936	Human chromosome 2	640	14.8	0.8	22	1	AAQ61708	Human biallelic ma
568	14.8	0.8	20	1	AAZ36936	Human Stat3 antise	641	14.8	0.8	22	1	AAQ61708	Reverse primer #25
569	14.8	0.8	20	1	AAZ36936	Human dual specif	642	14.8	0.8	22	1	AAQ61708	Mouse LKb1 PCR pri
570	14.8	0.8	20	1	AAZ36936	Mouse CLASP-5 PCR	643	14.8	0.8	22	1	AAQ61708	Human gene single
571	14.8	0.8	20	1	AAZ36936	Human HKR1 phospho	644	14.8	0.8	22	1	AAQ61708	Human gene single
572	14.8	0.8	20	1	AAZ36936	MHC class II trans	645	14.8	0.8	22	1	AAQ61708	Human gene single
573	14.8	0.8	20	1	AAZ36936	IGF503 polymorphis	646	14.8	0.8	22	1	AAQ61708	Human gene single
574	14.8	0.8	20	1	AAZ36936	Forward Ag5335 RT-	647	14.8	0.8	22	1	AAQ61708	Human gene single
575	14.8	0.8	20	1	AAZ36936	Human gene PCR pri	648	14.8	0.8	22	1	AAQ61708	Human gene single
576	14.8	0.8	20	1	AAZ36936	Human oligonucleot	649	14.8	0.8	22	1	AAQ61708	Human gene single
577	14.8	0.8	20	1	AAZ36936	NRV polymorphis d	650	14.8	0.8	22	1	AAQ61708	Equine GM-CSF gene
578	14.8	0.8	20	1	AAZ36936	H8612-derived oli	651	14.8	0.8	22	1	AAQ61708	PCR primer for mec
579	14.8	0.8	20	1	AAZ36936	Human SMRT chimeri	652	14.8	0.8	22	1	AAQ61708	SNP specific lower
580	14.8	0.8	20	1	AAZ36936	Human SMRT target	653	14.8	0.8	22	1	AAQ61708	Primer PHN33881, t
581	14.8	0.8	20	1	AAZ36936	Cyclin dependent k	654	14.8	0.8	22	1	AAQ61708	YMDD oligonucleoti
582	14.8	0.8	20	1	AAZ36936	Human PCTAIRE prot	655	14.8	0.8	22	1	AAQ61708	YMDD oligonucleoti
583	14.8	0.8	20	1	AAZ36936	Human PCTAIRE prot	656	14.8	0.8	22	1	AAQ61708	YMDD oligonucleoti
584	14.8	0.8	20	1	AAZ36936	Human polo-like ki	657	14.8	0.8	22	1	AAQ61708	YMDD oligonucleoti
585	14.8	0.8	20	1	AAZ36936	Human polo-like ki	658	14.8	0.8	22	1	AAQ61708	YMDD oligonucleoti
586	14.8	0.8	20	1	AAZ36936	Nucleic acid analy	659	14.8	0.8	22	1	AAQ61708	YMDD oligonucleoti
587	14.8	0.8	20	1	AAZ36936	Primer of the inve	660	14.8	0.8	22	1	AAQ61708	YMDD oligonucleoti
588	14.8	0.8	20	1	AAZ36936	Antisense DNA olig	661	14.8	0.8	22	1	AAQ61708	DMS:acceptor oxido
589	14.8	0.8	20	1	AAZ36936	Antisense DNA olig	662	14.8	0.8	22	1	AAQ61708	Human TNFR2 forwar
590	14.8	0.8	20	1	AAZ36936	Antisense DNA olig	663	14.8	0.8	22	1	AAQ61708	NOV68 PCR primer,
591	14.8	0.8	20	1	AAZ36936	Human NOVX PCR pri	664	14.8	0.8	22	1	AAQ61708	Human OCT1 consens
592	14.8	0.8	20	1	AAZ36936	Human mPGES-1 chim	665	14.8	0.8	22	1	AAQ61708	Nucleic acid encod
593	14.8	0.8	20	1	AAZ36936	Mouse phospholipas	666	14.8	0.8	22	1	AAQ61708	Rat ERK-3 designe
594	14.8	0.8	20	1	AAZ36936	Human Hsp1 antisen	667	14.8	0.8	22	1	AAQ61708	Human KIAA0172 ass
595	14.8	0.8	20	1	AAZ36936	Human Hsp1 antisen	668	14.8	0.8	22	1	AAQ61708	Human CYP2D6 probe
596	14.8	0.8	20	1	AAZ36936	Set 2 right PCR pr	669	14.8	0.8	22	1	AAQ61708	Human DNA probe us
597	14.8	0.8	20	1	AAZ36936	Human biallelic po	670	14.8	0.8	22	1	AAQ61708	Human DNA probe us
598	14.8	0.8	21	1	AAZ36936	Cancer associated	671	14.8	0.8	22	1	AAQ61708	Human DNA probe us
599	14.8	0.8	21	1	AAZ36936	Human polymorphic	672	14.8	0.8	22	1	AAQ61708	Human DNA probe us
600	14.8	0.8	21	1	AAZ36936	Human polymorphic	673	14.8	0.8	22	1	AAQ61708	Human DNA probe us
601	14.8	0.8	21	1	AAZ36936	Human LIPIN1 gene p	674	14.8	0.8	22	1	AAQ61708	Human DNA probe us
602	14.8	0.8	21	1	AAZ36936	Murine chemokine r	675	14.8	0.8	22	1	AAQ61708	Human DNA probe us
603	14.8	0.8	21	1	AAZ36936	Bacterial cytochro	676	14.8	0.8	22	1	AAQ61708	Human DNA probe us
604	14.8	0.8	21	1	AAZ36936	CDK2-targeted siNA	677	14.8	0.8	22	1	AAQ61708	Human DNA probe us
605	14.8	0.8	21	1	AAZ36936	CDK2-targeted siNA	678	14.8	0.8	22	1	AAQ61708	Human DNA probe us
606	14.8	0.8	21	1	AAZ36936	Human Flt-1 DNA se	679	14.8	0.8	22	1	AAQ61708	Human DNA probe us
607	14.8	0.8	21	1	AAZ36936	Single multiplex P	680	14.8	0.8	22	1	AAQ61708	Human DNA probe us
608	14.8	0.8	21	1	AAZ36936	Primer for domain	681	14.8	0.8	22	1	AAQ61708	Device with substa
609	14.8	0.8	22	1	AAZ36936	Primer #2 for immu	682	14.8	0.8	22	1	AAQ61708	Device with substa
610	14.8	0.8	22	1	AAZ36936	Canine disease mar	683	14.8	0.8	22	1	AAQ61708	Bacillus sp novel
611	14.8	0.8	22	1	AAZ36936	Canine disease mar	684	14.8	0.8	22	1	AAQ61708	Bacillus sp novel
612	14.8	0.8	22	1	AAZ36936	Immunoglobulin kap	685	14.8	0.8	22	1	AAQ61708	Human NOV2 gene PC
613	14.8	0.8	22	1	AAZ36936	Primer VK3-R for h	686	14.8	0.8	22	1	AAQ61708	Human NOV1 gene PC
614	14.8	0.8	22	1	AAZ36936	Primer 2 for human	687	14.8	0.8	22	1	AAQ61708	Human NOV1 gene PC
615	14.8	0.8	22	1	AAZ36936	SNP specific lower	688	14.8	0.8	22	1	AAQ61708	Human NOV2 gene PC
616	14.8	0.8	22	1	AAZ36936	PCR primer vkappa3	689	14.8	0.8	22	1	AAQ61708	Novel human protei
617	14.8	0.8	22	1	AAZ36936		690	14.8	0.8	22	1	AAQ61708	Human NOVX DNA PCR

253	15.8	0.9	23	1	AAH47509	Forward primer use	c 326	15.2	0.9	20	1	AAH63365	Granule bound star
254	15.8	0.9	23	1	ADG29464	CDK2 siRNA-target R	c 327	15.2	0.9	20	1	AAH17949	Anti-CMV oligonucleotide
255	15.8	0.9	24	1	ABV74651	Human ribosomal protein	c 328	15.2	0.9	20	1	AAH17894	Anti-CMV oligonucleotide
256	15.8	0.9	24	1	ABJ55122	Human Myb protein	c 329	15.2	0.9	20	1	AAH18135	STK 7 gene specific
257	15.6	0.9	22	1	AAZ56474	Vascular endothelial	c 330	15.2	0.9	20	1	AAZ18149	STK 14 gene specific
258	15.6	0.9	22	1	ABH59078	Human G-protein co	c 331	15.2	0.9	20	1	AAZ18163	STK 21 gene specific
259	15.6	0.9	23	1	AAQ37360	Probe for Streptococcus	c 332	15.2	0.9	20	1	AAH86355	PCR primer used to
260	15.6	0.9	23	1	AAQ37359	Probe for Streptococcus	c 333	15.2	0.9	20	1	AAH86355	PCR primer used to
261	15.6	0.9	23	1	AAQ02161	Human IVS17 3'-acc	c 334	15.2	0.9	20	1	AAZ27716	CDK4 specific anti
262	15.6	0.9	23	1	ADP11359	Taqman probe of th	c 335	15.2	0.9	20	1	AAZ44825	Human FADD primer
263	15.6	0.9	24	1	AAH40717	SNP specific upper	c 336	15.2	0.9	20	1	AAH68207	Gene typing PCR pr
264	15.6	0.9	24	1	ABH54362	Mucor circinellus	c 337	15.2	0.9	20	1	AAH68207	Human p38beta anti
265	15.6	0.9	24	1	ABK90912	Fruit fly LRR47 po	c 338	15.2	0.9	20	1	ABH280677	Beagle dog ob gene
266	15.6	0.9	24	1	ABQ10087	Oligonucleotide ad	c 339	15.2	0.9	20	1	AAH91033	Primer MUC5B rever
267	15.6	0.9	24	1	ABQ10128	Oligonucleotide ad	c 340	15.2	0.9	20	1	AAH91033	Human-specific glo
268	15.6	0.9	24	1	ABQ03115	Oligonucleotide ad	c 341	15.2	0.9	20	1	AAH91033	Human MCKK1 phosph
269	15.6	0.9	24	1	ABH4591	Capture oligonucle	c 342	15.2	0.9	20	1	AAH91033	Human Her-1 antise
270	15.6	0.9	24	1	ABH4591	Capture oligonucle	c 343	15.2	0.9	20	1	AAH91033	Chimeric beta-gluc
271	15.6	0.9	24	1	ABH4591	Capture oligonucle	c 344	15.2	0.9	20	1	AAH91033	Human calreticulin
272	15.6	0.9	24	1	ABH4591	Capture oligonucle	c 345	15.2	0.9	20	1	AAH91033	FAM modified probe
273	15.6	0.9	24	1	ABH4591	Capture oligonucle	c 346	15.2	0.9	20	1	AAH91033	Mouse genomic DNA
274	15.6	0.9	24	1	ABH4591	Capture oligonucle	c 347	15.2	0.9	20	1	AAH91033	Human RECQ protein
275	15.6	0.9	24	1	ADL61761	PCR primer 1 used	c 348	15.2	0.9	20	1	AAH91033	Phosphorothioate O
276	15.6	0.9	24	1	ADL61761	Mouse Ly6G6d cDNA	c 349	15.2	0.9	20	1	AAH91033	Human p38-beta map
277	15.4	0.9	17	1	ABK19257	Human ERG Ambrzym	c 350	15.2	0.9	20	1	AAH91033	Mouse src-c chimera
278	15.4	0.9	17	1	ABH75018	Human PAPP-Ea asso	c 351	15.2	0.9	20	1	AAH91033	Human TRH2 intron
279	15.4	0.9	17	1	ABH75018	Human CLCA1 gene e	c 352	15.2	0.9	20	1	AAH91033	Real time PCR targ
280	15.4	0.9	17	1	ACN10393	WNV minus strand I	c 353	15.2	0.9	20	1	AAH91033	Leptin gene-specif
281	15.4	0.9	17	1	ACN06744	MNV Ambrzym subs	c 354	15.2	0.9	20	1	AAH91033	PCR primer #2 used
282	15.4	0.9	17	1	ACC05856	Marine oligonucleo	c 355	15.2	0.9	20	1	AAH91033	Single nucleotide
283	15.4	0.9	19	1	AAH12600	Human Ty protease	c 356	15.2	0.9	20	1	AAH91033	Human gene PCR pri
284	15.4	0.9	19	1	AAH82722	cdk3 ribozyme bind	c 357	15.2	0.9	20	1	AAH91033	Acyl CoA cholesterol
285	15.4	0.9	19	1	AAH57884	Cell-cycle depende	c 358	15.2	0.9	20	1	AAH91033	Human p38 MAPK ant
286	15.4	0.9	19	1	AAH57884	Mitogen activated	c 359	15.2	0.9	20	1	AAH91033	GUS cDNA sequencin
287	15.4	0.9	19	1	AAH57884	Mitogen activated	c 360	15.2	0.9	20	1	AAH91033	Human GRK6 DNA tar
288	15.4	0.9	19	1	AAH57884	Human ERG2-targete	c 361	15.2	0.9	20	1	AAH91033	Human GRK6 DNA tar
289	15.4	0.9	19	1	AAH57884	Human ERG2-targete	c 362	15.2	0.9	20	1	AAH91033	Human GRK6 DNA tar
290	15.4	0.9	19	1	AAH57884	Human PDGFR-target	c 363	15.2	0.9	20	1	AAH91033	Human GRK6 DNA tar
291	15.4	0.9	19	1	AAH57884	Human PDGFR-target	c 364	15.2	0.9	20	1	AAH91033	Human GRK6 DNA tar
292	15.4	0.9	19	1	AAH57884	Tyrosine kinase ge	c 365	15.2	0.9	20	1	AAH91033	Human glucocorticoid
293	15.4	0.9	20	1	AAH57884	Human NOV4b revers	c 366	15.2	0.9	20	1	AAH91033	Human glucocorticoid
294	15.4	0.9	20	1	AAH57884	Human ABC transpor	c 367	15.2	0.9	20	1	AAH91033	Human glucocorticoid
295	15.4	0.9	20	1	AAH57884	Human MOL protein	c 368	15.2	0.9	20	1	AAH91033	Human glucocorticoid
296	15.4	0.9	20	1	AAH57884	Human gene express	c 369	15.2	0.9	20	1	AAH91033	Human glucocorticoid
297	15.4	0.9	20	1	AAH57884	Human P21 gene PCR	c 370	15.2	0.9	20	1	AAH91033	Human cell divisio
298	15.4	0.9	20	1	AAH57884	Forward PCR primer	c 371	15.2	0.9	20	1	AAH91033	Human cell divisio
299	15.4	0.9	20	1	AAH57884	Human beta-site AP	c 372	15.2	0.9	20	1	AAH91033	Human cell divisio
300	15.4	0.9	20	1	AAH57884	Human beta-site AP	c 373	15.2	0.9	20	1	AAH91033	Human cell divisio
301	15.4	0.9	20	1	AAH57884	Antisense oligonuc	c 374	15.2	0.9	20	1	AAH91033	Human LIM domain k
302	15.4	0.9	20	1	AAH57884	Antisense oligonuc	c 375	15.2	0.9	20	1	AAH91033	Cyclin dependent k
303	15.4	0.9	20	1	AAH57884	Human MRE3 cDNA t	c 376	15.2	0.9	20	1	AAH91033	Cyclin dependent k
304	15.4	0.9	20	1	AAH57884	Antisense oligonuc	c 377	15.2	0.9	20	1	AAH91033	Human phospholipase
305	15.4	0.9	20	1	AAH57884	Human P22R1A anti	c 378	15.2	0.9	20	1	AAH91033	Human phospholipase
306	15.4	0.9	20	1	AAH57884	Human foxhead box	c 379	15.2	0.9	20	1	AAH91033	Human VEGF co-regu
307	15.4	0.9	20	1	AAH57884	Human foxhead box	c 380	15.2	0.9	20	1	AAH91033	Human VEGF co-regu
308	15.4	0.9	20	1	AAH57884	Farnesoid X recept	c 381	15.2	0.9	20	1	AAH91033	Porcine stem cell
309	15.4	0.9	20	1	AAH57884	Farnesoid X recept	c 382	15.2	0.9	20	1	AAH91033	PCR primer of the
310	15.4	0.9	20	1	AAH57884	Farnesoid X recept	c 383	15.2	0.9	20	1	AAH91033	Human p38beta anti
311	15.4	0.9	20	1	AAH57884	Human PIM-1 DNA an	c 384	15.2	0.9	20	1	AAH91033	Human p38beta anti
312	15.4	0.9	20	1	AAH57884	Human PIM-1 DNA an	c 385	15.2	0.9	20	1	AAH91033	Human p38beta anti
313	15.4	0.9	20	1	AAH57884	Human foxhead box	c 386	15.2	0.9	20	1	AAH91033	Human p38beta anti
314	15.4	0.9	20	1	AAH57884	Rat MMP11 DNA anti	c 387	15.2	0.9	20	1	AAH91033	Human p38beta anti
315	15.4	0.9	20	1	AAH57884	Rat MMP11 DNA anti	c 388	15.2	0.9	20	1	AAH91033	Human p38beta anti
316	15.4	0.9	20	1	AAH57884	Human beta-site AP	c 389	15.2	0.9	20	1	AAH91033	Human p38beta anti
317	15.4	0.9	20	1	AAH57884	Human beta-site AP	c 390	15.2	0.9	20	1	AAH91033	Human p38beta anti
318	15.4	0.9	20	1	AAH57884	Human beta-site AP	c 391	15.2	0.9	20	1	AAH91033	Human p38beta anti
319	15.4	0.9	20	1	AAH57884	Primer for Human h	c 392	15.2	0.9	20	1	AAH91033	Human p38beta anti
320	15.4	0.9	20	1	AAH57884	Human gene single	c 393	15.2	0.9	20	1	AAH91033	Human p38beta anti
321	15.4	0.9	20	1	AAH57884	Escherichia coli p	c 394	15.2	0.9	20	1	AAH91033	Human p38beta anti
322	15.4	0.9	20	1	AAH57884	Parvovirus B19 PCR	c 395	15.2	0.9	20	1	AAH91033	Human p38beta anti
323	15.4	0.9	20	1	AAH57884	DE3-1 plasmid cons	c 396	15.2	0.9	20	1	AAH91033	Human p38beta anti
324	15.2	0.9	20	1	AAH57884	CMV antisense olig	c 397	15.2	0.9	20	1	AAH91033	Human p38beta anti
325	15.2	0.9	20	1	AAH57884	Peptide nucleic ac	c 398	15.2	0.9	20	1	AAH91033	Human p38beta anti

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OM nucleic - nucleic search, using sw model

Run on: November 2, 2004, 13:05:30 ; Search time 45 Seconds
(without alignments)
3.705 Million cell updates/sec

Title: us-10-017-621-3
Perfect score: 1745
Sequence: 1 tggagcagcgtaaaggatg.....gttcacctgccacattgtcc 1745

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 0.5

Searched: 2397 seqs, 47771 residues

Total number of hits satisfying chosen parameters: 4794

Minimum DB seq length: 8
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 2407 summaries

Database : rngdb:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	22.4	1.3	33	1	ABA04099 Human Cdk5 related
2	22.4	1.3	33	1	ABA04100 Human Cdk5 related
3	22	1.3	22	1	AAL61693 Human PCTAIRE prot
4	22	1.3	31	1	AAI30264 Human single nucle
5	21.4	1.2	21	1	AAI29606 Human single nucle
6	21	1.2	21	1	AAH62195 PCTAIRE-1 polymorp
7	20	1.1	20	1	AAL61700 Human PCTAIRE prot
8	20	1.1	20	1	AAL61714 Human PCTAIRE prot
9	20	1.1	20	1	AAL61720 Human PCTAIRE prot
10	20	1.1	20	1	AAL61749 Human PCTAIRE prot
11	20	1.1	20	1	AAL61759 Human PCTAIRE prot
12	20	1.1	20	1	AAL61767 Human PCTAIRE prot
13	20	1.1	20	1	AAL61772 Human PCTAIRE prot
14	20	1.1	20	1	AAL61773 Human PCTAIRE prot
15	20	1.1	20	1	AAL61706 Human PCTAIRE prot
16	20	1.1	20	1	AAL61727 Human PCTAIRE prot
17	20	1.1	20	1	AAL61737 Human PCTAIRE prot
18	20	1.1	20	1	AAL61750 Human PCTAIRE prot
19	20	1.1	20	1	AAL61754 Human PCTAIRE prot
20	20	1.1	20	1	AAL61756 Human PCTAIRE prot
21	20	1.1	20	1	AAL61765 Human PCTAIRE prot
22	20	1.1	20	1	AAL61768 Human PCTAIRE prot
23	20	1.1	20	1	AAL61718 Human PCTAIRE prot
24	20	1.1	20	1	AAL61728 Human PCTAIRE prot
25	20	1.1	20	1	AAL61753 Human PCTAIRE prot
26	20	1.1	20	1	AAL61758 Human PCTAIRE prot
27	20	1.1	20	1	AAL61770 Human PCTAIRE prot
28	20	1.1	20	1	AAL61715 Human PCTAIRE prot
29	20	1.1	20	1	AAL61732 Human PCTAIRE prot
30	20	1.1	20	1	AAL61745 Human PCTAIRE prot
31	20	1.1	20	1	AAL61757 Human PCTAIRE prot
32	20	1.1	20	1	AAL61764 Human PCTAIRE prot
33	20	1.1	20	1	AAL61726 Human PCTAIRE prot

1	AAL61740	20	1	AAL61740	Human PCTAIRE prot
2	AAL61741	20	1	AAL61741	Human PCTAIRE prot
3	AAL61760	20	1	AAL61760	Human PCTAIRE prot
4	AAL61771	20	1	AAL61771	Human PCTAIRE prot
5	AAL61704	20	1	AAL61704	Human PCTAIRE prot
6	AAL61707	20	1	AAL61707	Human PCTAIRE prot
7	AAL61724	20	1	AAL61724	Human PCTAIRE prot
8	AAL61729	20	1	AAL61729	Human PCTAIRE prot
9	AAL61755	20	1	AAL61755	Human PCTAIRE prot
10	AAL61748	20	1	AAL61748	Human PCTAIRE prot
11	AAL61703	20	1	AAL61703	Human PCTAIRE prot
12	AAL61723	20	1	AAL61723	Human PCTAIRE prot
13	AAL61733	20	1	AAL61733	Human PCTAIRE prot
14	AAL61734	20	1	AAL61734	Human PCTAIRE prot
15	AAL61739	20	1	AAL61739	Human PCTAIRE prot
16	AAL61766	20	1	AAL61766	Human PCTAIRE prot
17	AAL61702	20	1	AAL61702	Human PCTAIRE prot
18	AAL61705	20	1	AAL61705	Human PCTAIRE prot
19	AAL61712	20	1	AAL61712	Human PCTAIRE prot
20	AAL61736	20	1	AAL61736	Human PCTAIRE prot
21	AAL61747	20	1	AAL61747	Human PCTAIRE prot
22	AAL61761	20	1	AAL61761	Human PCTAIRE prot
23	AAL61710	20	1	AAL61710	Human PCTAIRE prot
24	AAL61742	20	1	AAL61742	Human PCTAIRE prot
25	AAL61698	20	1	AAL61698	Human PCTAIRE prot
26	AAL61699	20	1	AAL61699	Human PCTAIRE prot
27	AAL61709	20	1	AAL61709	Human PCTAIRE prot
28	AAL61721	20	1	AAL61721	Human PCTAIRE prot
29	AAL61735	20	1	AAL61735	Human PCTAIRE prot
30	AAL61746	20	1	AAL61746	Human PCTAIRE prot
31	AAL61763	20	1	AAL61763	Human PCTAIRE prot
32	AAL61730	20	1	AAL61730	Human PCTAIRE prot
33	AAL61731	20	1	AAL61731	Human PCTAIRE prot
34	AAL61751	20	1	AAL61751	Human PCTAIRE prot
35	AAL61752	20	1	AAL61752	Human PCTAIRE prot
36	AAL61775	20	1	AAL61775	Human PCTAIRE prot
37	AAL61708	20	1	AAL61708	Human PCTAIRE prot
38	AAL61717	20	1	AAL61717	Human PCTAIRE prot
39	AAL61722	20	1	AAL61722	Human PCTAIRE prot
40	AAL61725	20	1	AAL61725	Human PCTAIRE prot
41	AAL61744	20	1	AAL61744	Human PCTAIRE prot
42	AAL61762	20	1	AAL61762	Human PCTAIRE prot
43	AAL61703	20	1	AAL61703	Human PCTAIRE prot
44	AAL61711	20	1	AAL61711	Human PCTAIRE prot
45	AAL61716	20	1	AAL61716	Human PCTAIRE prot
46	AAL61719	20	1	AAL61719	Human PCTAIRE prot
47	AAL61769	20	1	AAL61769	Human PCTAIRE prot
48	AAL61774	20	1	AAL61774	Human PCTAIRE prot
49	AAL61713	20	1	AAL61713	Human PCTAIRE prot
50	AAL61738	20	1	AAL61738	Human PCTAIRE prot
51	AAL61743	20	1	AAL61743	Human PCTAIRE prot
52	ADK17439	24	1	ADK17439	Disrupted-in-schiz
53	ADK17453	24	1	ADK17453	Disrupted-in-schiz
54	ACI51216	25	1	ACI51216	Human microarray D
55	ACI51217	25	1	ACI51217	Human microarray D
56	AAZ29517	29	1	AAZ29517	Primer-2 for ident
57	AAA82879	19	1	AAA82879	cdk4 ribozyme bind
58	AAA82878	19	1	AAA82878	cdk4 ribozyme bind
59	AAH58041	19	1	AAH58041	Cell-cycle depende
60	AAH58040	19	1	AAH58040	Cell-cycle depende
61	AAL61694	19	1	AAL61694	Human PCTAIRE prot
62	ADI26995	19	1	ADI26995	Cyclin dependent k
63	ADI26843	20	1	ADI26843	Human microarray D
64	ACI39577	19	1	ACI39577	Human microarray D
65	ABT04565	28	1	ABT04565	Human ALDH3 gene p
66	ABN15303	25	1	ABN15303	Human DMPLP-1 25-m
67	ABV82335	25	1	ABV82335	Human HTPL scannin
68	ABV82336	25	1	ABV82336	Human HTPL scannin
69	ACK02038	25	1	ACK02038	Human microarray D
70	ABA99028	27	1	ABA99028	Human mammary gland
71	ABT03768	27	1	ABT03768	Human SHH gene PCR
72	ADG47704	26	1	ADG47704	AQP1 cDNA amplifi
73	ADJ56756	26	1	ADJ56756	PCR primer 1 used

PI Borowsky BE, Kyaw H, Bonini JA;
XX
XX WPI; 2003-801282/75.
XX
PT New recombinant nucleic acid encoding a mammalian SNORF7 receptor for use
PT as a probe and for expressing SNORF7 receptor in transfected cells.
XX
XX Disclosure; Page 3; Opp; English.
XX
XX The invention relates to mammalian SNORF7 receptors and to nucleic acid
XX molecules encoding such receptors. Polynucleotides of the invention are
XX used as probes to obtain homologous nucleic acids from other species and
XX to detect the existence of nucleic acids having complementary sequences
XX in samples. They are also used to express SNORF7 receptor in transfected
XX cells. The receptors are also used to design drugs for treating such
XX diseases as inflammation, autoimmune diseases and neurological disorders.
XX The present sequence is a PCR primer used to identify and isolate human
XX SNORF7 receptor cDNA
XX
SQ Sequence 24 BP; 5 A; 8 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 24;
Best Local Similarity 82.6%; Pred. No. 3.8e-02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0

Qy 951 CTGCCACCGCGCAGAGGTGCTAC 973
|| |||| |||||||||
Db 2 CTACCACCTCGCAGAGGTGCTGC 24

RESULT 162
ADF78061
ID ADF78061 standard; DNA; 24 BP.
XX
XX ADF78061;
XX
DT 26-FEB-2004 (first entry)
XX
XX Human GPCR, SNORF7, PCR primer BB1015.
XX
XX Human; GPCR; SNORF7; ss: G protein-coupled receptor; neuroregulator;
XX cell surface receptor; inflammation; arthritis; autoimmune disease; AIDS;
XX transplant rejection; infection; septicemia; psychosis;
XX neurological disorder; Parkinson's disease; Alzheimer's disease;
XX depression; respiratory disorder; asthma; eating disorder; obesity;
XX cardiovascular disorder; ischaemia; cancer; PCR; primer.
XX
XX Homo sapiens.
XX
XX US2003176685-A1.
XX
XX 18-SEP-2003.
XX
XX 07-MAY-2002; 2002US-00140210.
XX
XX 22-FEB-1999; 99US-00253999.
XX
XX 17-AUG-1999; 99US-00375926.
XX
XX (BORO/) BOROWSKY B E.
XX
XX (KYAW/) KYAW H.
XX
XX (BONI/) BONINI J A.
XX
XX Borowsky BE, Kyaw H, Bonini JA;
XX
XX WPI; 2003-898594/82.
XX
XX New recombinant nucleic acid comprising a sequence encoding a mammalian
XX SNORF7 receptor, useful for studying the effects of neuroregulators for
XX developing agonists and antagonists for cell surface receptors.
XX
XX Disclosure; SEQ ID NO 7; 25pp; English.
XX
XX The invention relates to a recombinant nucleic acid comprising a sequence

CC performing a single-nucleotide primer extension reaction. The
CC oligonucleotides are useful for determining the presence, absence or
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC assess by association analysis the genotype of an individual or group of
CC individuals, having a pathological phenotypic trait suspected of being
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC agamaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC traits also include symptoms of or susceptibility to multifactorial
CC disease of which a component is or may be genetic such as autoimmune
CC diseases, including, rheumatoid arthritis, multiple sclerosis,
CC inflammation, cancer, rheumatoid diseases and infection by pathogenic
CC microorganism. The method is also useful in forensic investigations and
CC paternity analysis. The present sequence represents a single nucleotide
CC primer extension (SNPE) primer specific for a human SNP containing DNA
CC sequence
XX
SQ Sequence 25 BP; 6 A; 9 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.9e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 874 CTGGATGACTGTGGACATCAT 896

Db 24 CTGGTGATGAGGAGACAT 2

RESULT 164

ABN15301

ID ABN15301 standard; DNA; 25 BP.

XX AC ABN15301;

XX 29-MAY-2002 (first entry)

XX Human GDMPLP-1 25-mer scanning SEQ ID NO:15293.

XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.

XX Homo sapiens.

XX WO200192524-A2.

XX 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.

XX 26-MAY-2000; 2000US-0207456P.

XX 21-SEP-2000; 2000US-0234687P.

XX 27-SEP-2000; 2000US-0236359P.

XX 04-OCT-2000; 2000GB-00024263.

XX 30-JAN-2001; 2001WO-US000661.

XX 30-JAN-2001; 2001WO-US000662.

XX 30-JAN-2001; 2001WO-US000663.

XX 30-JAN-2001; 2001WO-US000664.

XX 30-JAN-2001; 2001WO-US000665.

XX 30-JAN-2001; 2001WO-US000666.

XX 30-JAN-2001; 2001WO-US000667.

XX 30-JAN-2001; 2001WO-US000668.

XX 30-JAN-2001; 2001WO-US000669.

XX 30-JAN-2001; 2001WO-US000670.

XX 05-FEB-2001; 2001US-0266860P.

XX (ABOM-) ABOMICA INC.

XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;

XX WPT; 2002-179446/23.

XX

PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.

XX Disclosure; SEQ ID NO 15293; 214pp; English.

XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionization, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence

XX SQ Sequence 25 BP; 2 A; 11 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.9e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 555 CCTCAGCGCGCGCTCCGTCGTG 577

Db 3 CCTCATCTCCGCGCTCCATCGTG 25

RESULT 165

ABN15305

ID ABN15305 standard; DNA; 25 BP.

XX AC ABN15305;

XX 29-MAY-2002 (first entry)

XX Human GDMPLP-1 25-mer scanning SEQ ID NO:15297.
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.

XX Homo sapiens.

XX WO200192524-A2.

XX 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.

XX 26-MAY-2000; 2000US-0207456P.

XX 21-SEP-2000; 2000US-0234687P.

XX 27-SEP-2000; 2000US-0236359P.

XX 04-OCT-2000; 2000GB-00024263.

XX 30-JAN-2001; 2001WO-US000661.

XX 30-JAN-2001; 2001WO-US000662.

XX 30-JAN-2001; 2001WO-US000663.

XX 30-JAN-2001; 2001WO-US000664.

XX 30-JAN-2001; 2001WO-US000665.

XX 30-JAN-2001; 2001WO-US000666.

XX 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) ABOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 15297; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterize and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 25 BP; 2 A; 11 C; 4 G; 8 T; 0 U; 0 Other;
SQ Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.9e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 557 TCAGCGCGCGCTCGTGTGTC 579
Db 1 TCATCTCCGCTCCATCGTGC 23
RESULT 166
ABV82333/C
ID ABV82333 standard; DNA; 25 BP.
XX AC ABV82333;
XX
XX 03-JAN-2003 (first entry)
XX Human HTPL scanning oligonucleotide SEQ ID 3579.
DE Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
XX human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX Homo sapiens.
XX EP1229046-A2.
PN
XX 07-AUG-2002.
PN
XX 28-JAN-2002; 2002EP-00001167.
PF

XX 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 23-MAY-2001; 2001US-00864761.
PR 09-OCT-2001; 2001US-0327898P.
XX
XX (AEOM-) ABOMICA INC.
XX
XX Zhan J;
XX
XX WPI; 2002-676582/73.
XX
XX Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
XX Example 2; Page 533; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and ABV98519 to ABV98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 25 BP; 8 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.9e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 219 CCTGGATGAGAGTGTGTGTGTG 241
Db 25 CCAGGATGTTAGTGTGTGTG 3
RESULT 167
ABV82338/C
ID ABV82338 standard; DNA; 25 BP.
XX AC ABV82338;
XX
XX 03-JAN-2003 (first entry)
XX Human HTPL scanning oligonucleotide SEQ ID 3584.
DE Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
XX human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX Homo sapiens.
XX EP1229046-A2.
PN
XX 07-AUG-2002.
PF

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XX 28-JAN-2002; 2002EP-00001167.
PF
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 23-MAY-2001; 2001US-00864761.
PR 09-OCT-2001; 2001US-0327898P.
XX
PA (AEOM-) AEOMICA INC.
XX
XX
PI Zhan J;
XX
XX WPI; 2002-676582/73.
XX
XX Novel isolated human testis expressed patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
XX Example 2; Page 533; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
XX Sequence 25 BP; 7 A; 10 C; 2 G; 6 T; 0 U; 0 Other;
SQ

```

Query Match 1.0%; Score 16.6; DB 1; Length 25;

Best Local Similarity 82.6%; Pred. No. 3.9e+02;

Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 216 AGCCCTGGATGAGAGTGGTG 238

DB 23 AGCCAGGAGTGTAGTGGTG 1

RESULT 168

ABS75865

ID ABS75865 standard; DNA; 25 BP.

XX ABS75865;

AC ABS75865;

DT 27-DEC-2002 (first entry)

DE Human PAPP-Ea associated 25-mer SEQ ID 1391.

XX PAPP-E; human; pregnancy associated plasma protein E; abortive;

KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;

KW dysgenetic pregnancy; primer; ss.

XX Homo sapiens.

OS

PN US2002102252-A1.

XX

```

PD 01-AUG-2002.
XX
XX 06-APR-2001; 2001US-00827998.
XX
XX 26-MAY-2000; 2000US-0207456P.
PR (GUY/) GU Y.
PA (SHAN/) SHANNON M E.
XX
XX Gu Y, Shannon ME;
PI
XX WPI; 2002-697817/75.
XX
XX New isolated nucleic acid encoding an isoform of human pregnancy
PT associated plasma protein E, for preventing or aborting pregnancy.
XX
XX Example 2; Page 258; 353pp; English.
XX
XX This invention describes a novel isolated nucleic acid that encodes one
CC of three new isoforms of human pregnancy associated plasma protein E,
CC hPAPP-E. The products of the invention have abortive and contraceptive
CC activity and can be used for gene therapy or in a vaccine. The nucleic
CC acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC used in pharmaceutical compositions or vaccines for preventing or
CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC antibodies can be used to assess the expression levels of PAPP-E isoform
CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC antenatally. This sequence represents an oligomer used in scanning the
CC human PAPP-E genes described in the disclosure of the invention
XX
XX Sequence 25 BP; 10 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
SQ

```

Query Match 1.0%; Score 16.6; DB 1; Length 25;

Best Local Similarity 82.6%; Pred. No. 3.9e+02;

Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1005 CAACGAGAGGAGAGCTCAAGC 1027

DB 3 CAGCAAGAGGAGAGGTCAGC 25

RESULT 169

ABS75866

ID ABS75866 standard; DNA; 25 BP.

XX ABS75866;

AC ABS75866;

DT 27-DEC-2002 (first entry)

DE Human PAPP-Ea associated 25-mer SEQ ID 1392.

XX PAPP-E; human; pregnancy associated plasma protein E; abortive;

KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;

KW dysgenetic pregnancy; primer; ss.

XX Homo sapiens.

OS

PN US2002102252-A1.

XX 01-AUG-2002.

XX

PF 06-APR-2001; 2001US-00827998.

XX

XX 26-MAY-2000; 2000US-0207456P.

XX (GUY/) GU Y.

PA (SHAN/) SHANNON M E.

XX Gu Y, Shannon ME;

PI WPI; 2002-697817/75.

XX

XX

The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,016,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying allelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in situ hybridisation, in Southern, Northern or dot-blot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the

CC from USPTO at seqdata.uspto.gov/sequence.html
XX
SQ Sequence 25 BP; 4 A; 8 C; 11 G; 2 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.9e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 555 CCTCAGCCGCCGCTCGTCGTG 577
DB 24 CCCCAGCCGCCGCTCGTCGTG 2
RESULT 174
ACH62897/c
ID ACH62897 standard; DNA; 25 BP.
XX
XX ACH62897;
AC ACH62897;
DT 17-OCT-2003 (first entry)
XX
DE DNA target sequence #12033 useful in array for genetic analyses.
XX
KW Gene expression analysis; array; hybridisation; genetic variation;
KW tag-labelled compound; gene family; in situ hybridisation;
KW library screening; Southern hybridisation; northern hybridisation;
KW dot-blot hybridisation; gene sequence; mutation detection;
KW target sequence; probe; PCR; primer; ss.
XX
OS Unidentified.
XX
FN US2003082596-A1.
PN
XX
PD 01-MAY-2003.
XX
XX
PF 08-AUG-2002; 2002US-00215112.
XX
PR 08-AUG-2001; 2001US-0311040P.
XX
PA (MITT) MITTMANN M.
PI Mittmann M;
XX
DR WPI; 2003-576608/54.
PT New probe array useful e.g. for monitoring gene expression levels, for
PT analyzing genetic variations, or for hybridizing tag-labeled compounds,
PT comprises multiple nucleic acid probes.
XX
PS Claim 1; SEQ ID NO 12033; 9pp; English.
XX
CC The present invention relates to nucleic acid sequences that are
CC complementary to particular genes, and can be used as probes for a
CC variety of analyses such as gene expression analysis. Each probe
CC comprises 9 or more consecutive nucleotides from at least one of 14936
CC nucleotide sequences defined in the patent, or their perfect sense match,
CC sense mismatch, antisense match or antisense mismatch oligonucleotides.
CC The probes may be used in an array comprising at least 10 distinct
CC nucleic acid probes. The array is useful in monitoring gene expression
CC levels by hybridisation to a DNA library, in analysing genetic
CC variations, and in hybridising tag-labelled compounds. The probes are
CC useful for identifying family members of a gene. The probes are also
CC useful in situ hybridisations, in screening cDNA or genomic libraries
CC (or derived subclones) for additional clones containing segments of DNA
CC that have been previously isolated and sequenced, in Southern, northern,
CC or dot-blot hybridisation of genomic DNA to identify or detect the
CC sequence of any gene or detect specific mutations in any gene, and in
CC mapping the 5' termini of mRNA molecules by primer extensions. The
CC nucleic acid sequences of the invention are also useful as PCR primers.
CC The invention provides a large collection of nucleic acid sequences
CC complementary to particular genes with a wide range of analytical uses.
CC ACH50865-ACH5260 represent the target sequences of the invention. Note:
CC The sequence data for this patent was obtained in electronic format

CC directly from the USPTO web site at seqdata.uspto.gov/psipsDIDEntry.html
XX
SQ Sequence 25 BP; 6 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.9e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1136 ACTACTCCACTCAGATTGACATG 1158
DB 25 ACTACCACACTCAGTGTGACATG 3
RESULT 175
ADP15685/c
ID ADP15685 standard; DNA; 25 BP.
XX
XX ADP15685;
AC ADP15685;
DT 26-AUG-2004 (first entry)
XX
DE Renal cell carcinoma differentially expressed gene probe #2090.
XX
KW ss; diagnosis; non-blood disease; solid tumor; gene expression;
KW peripheral blood mononuclear cell; renal cell carcinoma; prostate cancer;
KW head/neck cancer; differential expression; probe.
XX
OS Homo sapiens.
XX
FN WO2004048933-A2.
PN
XX
PD 10-JUN-2004.
XX
XX
PF 21-NOV-2003; 2003WO-US037481.
XX
PR 21-NOV-2002; 2002US-0427982P.
PR 03-APR-2003; 2003US-0459782P.
XX
PA (AMHP) WYETH.
PA (TWIN) TWINE N C.
PA (BURC) BURCZYNSKI M E.
PA (TREP) TREPICCHIO W L.
PA (DORN) DORNER A.
PA (STOV) STOVER J A.
PA (SLON) SLONI D K.
XX
XX Twine NC, Burczynski ME, Trepicchio WL, Dorner A, Stover JA;
PI Sloni DK;
XX
XX WPI; 2004-460799/43.
XX
PT Diagnosing non-blood disease such as solid tumor, involves comparing
PT differential expression profile of specific genes in peripheral blood
PT sample of subject with reference expression profile of specific genes.
XX
PS Disclosure; SEQ ID NO 2421; 350pp; English.
XX
CC The invention relate to a method of diagnosing (M1) non-blood disease
CC such as solid tumor by providing peripheral blood sample of human having
CC non-blood disease, and comparing an expression profile of specific genes
CC in the peripheral blood sample to reference expression profile of the
CC genes, where each of the genes is differentially expressed in peripheral
CC blood mononuclear cells (PBMCs) of patients having the disease as
CC compared to PBMCs of normal humans. The method is useful for diagnosing
CC renal cell carcinoma (RCC), prostate cancer and head/neck cancer. The
CC peripheral blood sample comprises enriched PBMCs. The peripheral blood
CC sample is a whole blood sample (claimed). (M1) is useful for identifying
CC genes that are differentially expressed in peripheral blood samples
CC isolated at different stages of progression, development or treatment of
CC RCC and/or other solid tumors. This sequence corresponds to a probe to
CC detect a gene that is differentially expressed and detected by the method
CC of the invention.

```
XX
SQ Sequence 25 BP; 6 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
Query Match 1.0%; Score 16.6; DB 1; Length 25;
Best Local Similarity 82.6%; Pred. No. 3.9e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 607 CTGGAGACCTACATTAAAGCTGGA 629
DB 25 CTGTAGACTGACATTAAGCAGGA 3

RESULT 176
AAV60744/C
ID AAV60744 standard; DNA; 18 BP.
XX
AC AAV60744;
XX
DT 08-DEC-1998 (first entry)
XX
DE Primer #2 for human CDK4 codons 1-163.
XX
KW PCR primer; amplification; yeast; UAS; upstream activating sequence;
transcription terminator; cell cycle; Upstream Activation Sequence; UAS;
KW promoter; phosphorylation; cyclin; cyclin-dependent kinase; CDK; vector;
KW cyclin kinase inhibitor; CKI; growth; wound healing; cancer therapy; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9816660-A1.
XX
PD 23-APR-1998.
XX
PF 16-OCT-1997; 97WO-US018608.
XX
PR 16-OCT-1996; 96US-0029127P.
XX
PR 27-NOV-1996; 96US-0031968P.
XX
PA (BITT-) BITTECH INC.
XX
PI Bitter GA;
XX
WPI; 1998-251302/22.
XX
Screening for agents that effect cell cycle regulatory proteins - using a
cell line that expresses a reporter gene in response to regulation
through phosphorylation by a cyclin/CDK system.
XX
Example 4; Page 75; 93pp; English.
XX
Primers AAV60743-V60745 were used to PCR amplify codons 1-163 of the
human cyclin-dependent kinase 4 (hCDK4). The amplified product was used
to generate a fusion protein comprising part of the hCDK4 sequence linked
to codons 154-302 of the yeast PHO85 gene. The fusion protein is used to
screen for compounds that affect mammalian cell cycle regulatory
proteins. The method comprises administering a compound to a cell line,
which contains a reporter gene linked to an Upstream Activation Sequence
(UAS) and a promoter, where the UAS binds a transcription control factor
(TCF) which is regulated through cyclin/cyclin-dependent kinase (CDK)
phosphorylation. Also included in the construct is an effector gene
providing a gene product to permit normal cyclin/CDK regulation of the
TCF. Expression of the reporter gene is then analysed in the cell line,
thereby determining whether the compound affects the normal regulation.
The method can be used to identify inhibitors and activators of mammalian
cell cycle regulatory proteins, especially inhibitors and activators of
cyclins, CDKs, cyclin/CDK complexes, cyclin kinase inhibitors (CKIs), and
cyclin/CDK/CKI complexes. The identified agents can be used for
stimulating growth of cells (as in wound healing), or regulating
excessive cell growth and division (as in cancer therapy)
XX
Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
XX
```

```
Query Match 0.9%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 3.2e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGGCCGGA 1050
DB 18 GACTTTGGCTGGCCGGA 1

RESULT 177
AAA82762
ID AAA82762 standard; DNA; 19 BP.
XX
AC AAA82762;
XX
DT 04-DEC-2000 (first entry)
XX
DE cdk3 ribozyme binding site #47.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS Mammalia.
XX
PN WO200032765-A2.
XX
PD 08-JUN-2000.
XX
PF 06-DEC-1999; 99WO-US028772.
XX
PR 04-DEC-1998; 98US-0110954P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch RJ, Barber JR, Robbins JM;
XX
WPI; 2000-412314/35.
XX
New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.
XX
Disclosure; Page 51; 109pp; English.
XX
The present invention relates to a hairpin or hammerhead ribozyme,
designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX
Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
inhibiting restenosis by introduction of the ribozyme into cells. The
ribozyme is resistant to endonuclease activity and hence is efficient in
restenosis treatment
XX
Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 3.3e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1029 GGCTGACTTGGCTGGC 1046
DB 1 GGCTGACTTGGCTGGC 18

RESULT 178
AAH57924
ID AAH57924 standard; DNA; 19 BP.
XX
AC AAH57924;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:348.
XX
```

KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulvectomy;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW antiskinning; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.

XX Homo sapiens.
OS Synthetic.

XX WO200130362-A2.

XX 03-MAY-2001.

XX 26-OCT-2000; 2000WO-US029500.

XX 26-OCT-1999; 99US-0161532P.

XX (IMMU-) IMMUSOL INC.

XX Robbins JM, Tritz R;

XX WPI; 2001-300427/31.

XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.

XX Example 1; Page 97; 408pp; English.

CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiproliferative,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulvectomy, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention

XX Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 3.3e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1029 GGCTGACTTTCGCTGGC 1046

DB 1 GGCTGACTTTCGCTGGC 18

RESULT 179

AAZ18127

ID AAZ18127 standard; DNA; 20 BP.

XX AC AAZ18127;

XX 11-OCT-1999 (first entry)

XX

DE STK 3 gene specific primer.

XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW primer; ss.

OS Synthetic.

OS Homo sapiens.

XX WO9934016-A2.

XX 08-JUL-1999.

XX 28-DEC-1998; 98WO-IL000625.

XX 29-DEC-1997; 97IL-00122793.

XX 16-OCT-1998; 98IL-00126627.

XX (GENE-) GENENA LTD.

XX Vider B;

XX WPI; 1999-419113/35.

XX P-PSDB; AAY14662.

XX Identifying and characterizing cells by comparing the pattern of gene
PT expression in a selected gene family.

XX Claim 4; Page 44; 102pp; English.

CC The invention provides a new method for identifying and characterising
CC cells. The method for determining the genetic proximity of a first cell
CC and a second cell comprises: (a) obtaining the first cell and the second
CC cell; (b) determining in the first cell and the second cell the pattern
CC of expression of genes in a selected gene family; and (c) calculating a
CC proximity index using a specified formula. The methods can be used for
CC characterising cells, e.g. for determining the origin of a cell, its
CC genetic status, whether it carries a genetic defect, or whether it is
CC transformed. They can be used for detecting a selected genetic defect in
CC an individual, e.g. a fetus. They can also be used for determining the
CC effect of a selected treatment on a test cell. They can also be used for
CC obtaining cells capable of expressing an homeobox related desired
CC property. The method uses reverse transcriptase polymerase chain reaction
CC (RT-PCR) for determining the pattern of gene expression in a selected
CC gene family. Sequences AAZ17803-218342 represent primers that can be used
CC in the RT-PCR reactions to determine the pattern of gene expression. The
CC gene family can be selected from a set of homeobox genes, kinase genes,
CC protein phosphatase genes, P450 enzyme genes, steroid receptor
CC superfamily genes or cadherin superfamily genes

XX Sequence 20 BP; 8 A; 9 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 3.5e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 972 ACACCGAGACTCTAAGCC 989

DB 3 ACACCGAGACTCTAAGCC 20

RESULT 180

AAZ18155

ID AAZ18155 standard; DNA; 20 BP.

XX AC AAZ18155;

XX 11-OCT-1999 (first entry)

XX STK 17 gene specific primer.

XX Genetic proximity; gene expression; cell characterisation; homeobox gene;

KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9934016-A2.
 XX
 PD 08-JUL-1999.
 XX
 PF 28-DEC-1998; 98WO-IL000625.
 XX
 PR 29-DEC-1997; 97IL-00122793.
 PR 16-OCT-1998; 98IL-00126627.
 XX
 XX (GENE-) GENENA LTD.
 PA
 PI Vidar B;
 XX
 DR WPI; 1999-419113/35.
 DR P-PSDB; AAY14690.
 XX
 XX Identifying and characterizing cells by comparing the pattern of gene
 PT expression in a selected gene family.
 XX
 PS Claim 4; Page 45; 102pp; English.
 XX
 CC The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell
 CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining in the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AA217603-218342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX
 SQ Sequence 20 BP; 8 A; 9 C; 2 G; 1 T; 0 U; 0 Other;
 Query Match 0.9%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 3.5e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 972 ACACCGAGACTCAAGCC 989
 DB 3 ACACCGAGACTCAACC 20
 RESULT 181
 AA218141
 ID AA218141 standard; DNA; 20 BP.
 XX
 AC AA218141;
 DT 11-OCT-1999 (first entry)
 XX
 DE SKK 10 gene specific primer.
 XX
 KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.

XX Synthetic.
 OS Homo sapiens.
 XX
 PN WO9934016-A2.
 XX
 PD 08-JUL-1999.
 XX
 PF 28-DEC-1998; 98WO-IL000625.
 XX
 PR 29-DEC-1997; 97IL-00122793.
 PR 16-OCT-1998; 98IL-00126627.
 XX
 XX (GENE-) GENENA LTD.
 PA
 PI Vidar B;
 XX
 DR WPI; 1999-419113/35.
 DR P-PSDB; AAY14676.
 XX
 XX Identifying and characterizing cells by comparing the pattern of gene
 PT expression in a selected gene family.
 XX
 PS Claim 4; Page 44; 102pp; English.
 XX
 CC The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell
 CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining in the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AA217603-218342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX
 SQ Sequence 20 BP; 8 A; 9 C; 2 G; 1 T; 0 U; 0 Other;
 Query Match 0.9%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 3.5e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 972 ACACCGAGACTCAAGCC 989
 DB 3 ACACCGAGACTCAACC 20
 RESULT 182
 ABZ93276/C
 ID ABZ93276 standard; DNA; 20 BP.
 XX
 AC ABZ93276;
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX

OS Homo sapiens.
 PN WO200285308-A2.
 XX 31-OCT-2002.
 PD 23-APR-2002; 2002WO-US013135.
 XX 24-APR-2001; 2001US-0286137P.
 PF (EPIG-) EPIGENESIS PHARM INC.
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 DR Pharmaceutical composition for treating ailments associated with impaired
 XX respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX Disclosure; SEQ ID NO 8518; 872pp; English.
 PS The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' and genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 20 BP; 6 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 3.5e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1087 GTGGTGACACTGTGGTAC 1104
 Db |||||
 20 GTGGTGACACTGTGGTGC 3
 RESULT 183
 ABD29506/C
 ID ABD29506 standard; DNA; 20 BP.
 XX
 AC ABD29506;
 XX
 XX 29-JUL-2004 (first entry)
 DT
 XX AA664176-derived oligonucleotide SEQ ID 8518.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW

KW pulmonary transplantation rejection; ss; primer.
 XX Homo sapiens.
 XX WO200285309-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013143.
 XX 24-APR-2001; 2001US-0286036P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 DR Pharmaceutical composition for treating asthma, has antisense
 XX oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX Claim 15; SEQ ID NO 8518; 763pp; English.
 PS This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX Sequence 20 BP; 6 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 3.5e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1087 GTGGTGACACTGTGGTAC 1104
 Db |||||
 20 GTGGTGACACTGTGGTGC 3
 RESULT 184
 ADI28140/C
 ID ADI28140 standard; DNA; 20 BP.
 XX
 AC ADI28140;

ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;
 KW antiarteriosclerotic; hepatotropic; litholytic; anorectic;
 KW neuroprotective; vasotropic; antisense; gene therapy;
 KW Farnesoid X receptor; diabetes; immunological disorder;
 KW cardiovascular disorder; dyslipidemia; atherosclerosis;
 KW high density lipoprotein; low density lipoprotein; hypercholesterolemia;
 KW gallstones; hypertriglyceridemia; obesity; neurological disorder;
 KW ischemia; reperfusion; diagnostics; prophylaxis.
 XX
 OS Homo sapiens.
 XX
 XX WO2004030750-A1.
 PN
 XX
 PD 15-APR-2004.
 XX
 XX 25-SEP-2003; 2003WO-US030353.
 PF
 XX
 XX 25-SEP-2002; 2002US-0413588P.
 PR
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Kane CD;
 PI
 XX WPI; 2004-347928/32.
 DR
 XX
 XX New antisense oligonucleotides useful for modulating expression of
 PT Farnesoid X receptor (FXR) or for treating diseases associated with FXR,
 PT e.g. diabetes, immunological disorders, cardiovascular disorders,
 PT gallstones or obesity.
 XX
 XX Claim 4; SEQ ID NO 2062; 150pp; English.
 PS
 XX The invention relates to an antisense compound 8-30 nucleobases in length
 CC targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
 CC where the antisense compound specifically hybridizes with and inhibits
 CC the expression of FXR. The composition and methods are useful for
 CC inhibiting the expression of FXR (Farnesoid X receptor) in cells or
 CC tissues, or for treating diseases or conditions associated with FXR, such
 CC as diabetes, immunological disorders, cardiovascular disorders, e.g.
 CC dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
 CC lipoprotein), elevated LDL (low density lipoprotein) or
 CC hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,
 CC neurological disorders, or ischemia/reperfusion injury. In addition, the
 CC composition is used for diagnostics, prophylaxis, or as research reagents
 CC or kits. This sequence corresponds to an antisense oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.9%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 3.5e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 1658 ACACCCCTCAGGCGCAG 1675
 Db 1 ACACCCCTCAGGCTCAG 18
 RESULT 187
 ADO54507
 ID ADO54507 standard; DNA; 20 BP.
 XX
 XX ADO54507;
 AC
 XX 15-JUL-2004 (first entry)
 DT
 XX Farnesoid X receptor gene expression antisense inhibitory oligo #1880.
 DE
 XX ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;
 KW antiarteriosclerotic; hepatotropic; litholytic; anorectic;
 KW neuroprotective; vasotropic; antisense; gene therapy;
 KW Farnesoid X receptor; diabetes; immunological disorder;
 KW cardiovascular disorder; dyslipidemia; atherosclerosis;
 KW high density lipoprotein; low density lipoprotein; hypercholesterolemia;
 KW gallstones; hypertriglyceridemia; obesity; neurological disorder;
 KW ischemia; reperfusion; diagnostics; prophylaxis.
 XX
 OS Homo sapiens.

high density lipoprotein; low density lipoprotein; hypercholesterolemia;
 KW gallstones; hypertriglyceridemia; obesity; neurological disorder;
 KW ischemia; reperfusion; diagnostics; prophylaxis.
 XX
 OS Homo sapiens.
 XX
 XX WO2004030750-A1.
 PN
 XX
 PD 15-APR-2004.
 XX
 XX 25-SEP-2003; 2003WO-US030353.
 PF
 XX
 XX 25-SEP-2002; 2002US-0413588P.
 PR
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Kane CD;
 PI
 XX WPI; 2004-347928/32.
 DR
 XX
 XX New antisense oligonucleotides useful for modulating expression of
 PT Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,
 PT e.g. diabetes, immunological disorders, cardiovascular disorders,
 PT gallstones or obesity.
 XX
 XX Claim 4; SEQ ID NO 1880; 150pp; English.
 PS
 XX The invention relates to an antisense compound 8-30 nucleobases in length
 CC targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
 CC where the antisense compound specifically hybridizes with and inhibits
 CC the expression of FXR. The composition and methods are useful for
 CC inhibiting the expression of FXR (Farnesoid X receptor) in cells or
 CC tissues, or for treating diseases or conditions associated with FXR, such
 CC as diabetes, immunological disorders, cardiovascular disorders, e.g.
 CC dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
 CC lipoprotein), elevated LDL (low density lipoprotein) or
 CC hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,
 CC neurological disorders, or ischemia/reperfusion injury. In addition, the
 CC composition is used for diagnostics, prophylaxis, or as research reagents
 CC or kits. This sequence corresponds to an antisense oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 0.9%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 3.5e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 1658 ACACCCCTCAGGCGCAG 1675
 Db 3 ACACCCCTCAGGCTCAG 20
 RESULT 188
 ADO54610
 ID ADO54610 standard; DNA; 20 BP.
 XX
 XX ADO54610;
 AC
 XX 15-JUL-2004 (first entry)
 DT
 XX Farnesoid X receptor gene expression antisense inhibitory oligo #1983.
 DE
 XX ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;
 KW antiarteriosclerotic; hepatotropic; litholytic; anorectic;
 KW neuroprotective; vasotropic; antisense; gene therapy;
 KW Farnesoid X receptor; diabetes; immunological disorder;
 KW cardiovascular disorder; dyslipidemia; atherosclerosis;
 KW high density lipoprotein; low density lipoprotein; hypercholesterolemia;
 KW gallstones; hypertriglyceridemia; obesity; neurological disorder;
 KW ischemia; reperfusion; diagnostics; prophylaxis.
 XX
 OS Homo sapiens.

XX WO2004030750-A1.
PN
XX
XX
PD 15-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030353.
XX
XX 25-SEP-2002; 2002US-0413588P.
XX
XX (PHAA) PHARMACIA CORP.
PA
XX
XX Kane CD;
PI
XX
XX WPI; 2004-347928/32.
DR
XX
XX New antisense oligonucleotides useful for modulating expression of
PT Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,
PT e.g. diabetes, immunological disorders, cardiovascular disorders,
PT gallstones or obesity.
XX
XX Claim 4; SEQ ID NO 1983; 150pp; English.
PS
XX
XX The invention relates to an antisense compound 8-30 nucleobases in length
CC targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
CC where the antisense compound specifically hybridizes with and inhibits
CC the expression of FXR. The composition and methods are useful for
CC inhibiting the expression of FXR (Farnesoid X receptor) in cells or
CC tissues, or for treating diseases or conditions associated with FXR, such
CC as diabetes, immunological disorders, cardiovascular disorders, e.g.
CC dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
CC lipoprotein), elevated LDL (low density lipoprotein) or
CC hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,
CC neurological disorders, or ischemia/reperfusion injury. In addition, the
CC composition is used for diagnostics, prophylaxis, or as research reagents
CC or kits. This sequence corresponds to an antisense oligonucleotide of the
XX invention.
XX
XX Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 3.5e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1658 ACACCCTCAGGGCAG 1675
DB 2 ACACCCTCAGGGCAG 19
RESULT 189
AAD30434
ID AAD30434 standard; DNA; 24 BP.
XX
XX
AC AAD30434;
XX
XX 21-MAY-2002 (first entry)
DT
XX Human androgen receptor (AR) gene exon 1 amplifying primer #3.
DE
XX Human; AIB1; amplified in breast cancer 1; androgen receptor; AR;
KW prostate cancer; exon 1; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX WO200210452-A2.
PN
XX
XX 07-FEB-2002.
PD
XX
XX 27-JUL-2001; 2001WO-US023834.
PF
XX
XX 27-JUL-2000; 2000US-0221074P.
PR
XX
XX (UYRP) UNIV ROCHESTER.
PA

PI Chang C;
XX
XX WPI; 2002-206195/26.
XX
XX Assessing the risk of acquiring or developing prostate cancer in a human
PT subject, comprises determining the length of the contiguous CAG, CAA
PT and/or GGN repeats in the AIB1 gene and/or androgen receptor gene of the
PT subject.
XX
XX Claim 39; Page 42; 86pp; English.
PS
XX
XX The invention relates to a method for assessing the risk of prostate
CC cancer in a human subject. The method involves determining the length of
CC the contiguous CAG or CAA repeats in both AIB1 (Amplified In Breast
CC cancer 1) gene alleles or contiguous CAG, CAA or GGN repeats in the
CC androgen receptor gene of the subject. The method is useful for assessing
CC a subject's risk for acquiring or developing prostate cancer. The present
CC sequence is a PCR primer used to amplify human androgen receptor (AR)
CC gene exon 1 and is used in the molecular analysis and assessment of the
CC GGN repeat of AR gene
XX
XX Sequence 24 BP; 3 A; 13 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 16.4; DB 1; Length 24;
Best Local Similarity 94.4%; Pred. No. 4.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 554 CCCTCAGCGCGCCTCC 571
DB 2 CCCTCAGCGCGCCTCC 19
RESULT 190
ACI40315/C
ID ACI40315 standard; DNA; 25 BP.
XX
XX ACI40315;
AC
XX 13-OCT-2003 (first entry)
DT
XX Human microarray DNA oligonucleotide SEQ ID NO 40306.
DE
XX EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX
XX Homo sapiens.
OS
XX US2003104410-A1.
PN
XX
XX 05-JUN-2003.
PD
XX
XX 15-MAR-2002; 2002US-00098263.
PF
XX
XX 16-MAR-2001; 2001US-0276759P.
PR
XX (AFFY-) AFFYMETRIX INC.
PA
XX
XX Mittmann MP;
PI
XX
XX WPI; 2003-567953/53.
DR
XX
XX New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX
XX Claim 1; SEQ ID NO 40306; 9pp; English.
PS
XX
XX The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,

CC in analysis of genetic variation or in hybridisation of tag-labelled
 CC compounds. The nucleic acid probes are specifically designed for analysis
 CC of at least one target sequence. The method of analysis comprises
 CC hybridising at least one or more nucleic acids to at least two or more
 CC nucleic acid probes and detecting the hybridisation. The nucleic acid
 CC probes are attached to a solid support. The analysis comprises monitoring
 CC gene expression levels, identifying allelic markers or polymorphisms,
 CC or family members of a gene and a cross-species comparison. Each of the
 CC nucleic acids further comprises a tag sequence. The array of nucleic acid
 CC probes is useful in *in situ* hybridisation, in Southern, Northern or dot-
 CC blot hybridisation to identify or detect the sequence or specific
 CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
 CC primer extensions or in screening cDNA or genomic libraries or subclones
 CC for additional subclones containing segments of DNA that have been
 CC isolated and previously sequenced. The sequence presented is one of the
 CC nucleic acid probes incorporated in the microarray. Note: The sequence
 CC data for this patent can also be obtained in electronic format directly
 CC from USPTO at seqdata.uspto.gov/sequence.html
 XX
 SQ Sequence 25 BP; 2 A; 8 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 25;
 Best Local Similarity 94.4%; Pred. No. 4.3e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 977 GAGACCTCAAGCCCCAGA 994
 |||||
 DB 18 GAGACCTTACCCAGA 1

RESULT 191
 AAS11083
 ID AAS11083 standard; DNA; 21 BP.
 AC AAS11083;
 XX
 XX 24-OCT-2001 (first entry)
 XX
 DE Bacterial 16S RNA antisense oligomer #49.
 XX
 KW Antisense; bacterial 16S ribosomal RNA; rRNA; bacterial infection; human;
 KW food grain supplement; livestock; poultry; therapeutic; ss.
 XX
 OS Streptococcus pneumoniae.
 XX
 PN W0200142457-A2.
 XX
 PD 14-JUN-2001.
 XX
 XX 29-NOV-2000; 2000WO-US042391.
 PF
 XX 29-NOV-1999; 99US-0168150P.
 PR
 XX (AVIB-) AVI BIOPHARMA INC.
 PA
 PI Iversen PL;
 XX
 XX WPI; 2001-457295/49.
 DR
 XX

PT Antibacterial compound, useful for treating bacterial infections and as
 PT livestock and poultry food supplement, comprises antisense
 PT oligonucleotides complementary to bacterial 16S and 23S rRNA.
 XX
 XX Disclosure; Page 28; 62pp; English.
 XX
 XX AAS11035-AAS11157 represent the coding sequences of bacterial 16S
 CC ribosomal RNA (rRNA) antisense oligomers. These sequences are
 CC antibacterial compounds comprising substantially unchanged antisense
 CC oligomers containing 8-40 nucleotide subunits, including a targeting
 CC nucleic acid sequence at least 10 nucleotides in length which is
 CC complementary to a bacterial 16S or 23S rRNA nucleic acid sequence. The
 CC antisense oligomers are used for treating a bacterial infection in a
 CC human or a mammalian animal produced by *Escherichia coli*, *Salmonella*
 XX

CC typhimurium, *Pseudomonas aeruginosa*, *Vibrio cholera*, *Neisseria*
 CC gonorrhoea, *Helicobacter pylori*, *Bartonella hensellae*, *Haemophilus*
 CC influenza, *Shigella dysenteriae*, *Staphylococcus aureus*, *Mycobacterium*
 CC tuberculosis, *Streptococcus pneumoniae*, *Treponema pallidum* and *Chlamydia*
 CC trachomatis. The antibacterial compound may be used as a food grain
 XX supplement in livestock and poultry food composition
 SQ Sequence 21 BP; 6 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 4e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1439 ATGCCATGAAACATCCATCT 1459
 |||||
 DB 1 ATGTCATGCAACATCCATCT 21

RESULT 192
 ABK99296/c
 ID ABK99296 standard; RNA; 21 BP.
 XX
 AC ABK99296;
 XX
 XX 21-OCT-2002 (first entry)
 XX
 DE Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #26.
 XX
 KW Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
 XX
 OS Synthetic.
 XX
 PN US2002064771-A1.
 XX
 PD 30-MAY-2002.
 XX
 XX 06-APR-2001; 2001US-00828034.
 PF
 XX 07-APR-2000; 2000US-0195852P.
 PR
 XX (ZHON/) ZHONG W.
 PA (HONG/) HONG Z.
 PA (FERR/) FERRARI E.
 XX
 PI Zhong W, Hong Z, Ferrari E;
 XX
 XX WPI; 2002-582330/62.
 DR

PT Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
 PT nucleotide-long template to which a 2 nucleotide-long primer is annealed,
 PT and template and primer which do not form a stable duplex in the absence
 PT of HCV NS5B.
 XX
 XX Example; Page 6; 17pp; English.
 XX
 XX The invention relates to a replicase complex comprising a hepatitis C
 CC virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
 CC complementary nucleic acid primer which is annealed to the 3' terminus of
 CC the template, where the template is at least three nucleotides and the
 CC primer is two or three nucleotides, and the template and primer do not
 CC form a stable duplex in solution in the absence of the HCV NS5B protein.
 CC The complex is useful for detecting HCV replicase activity and permits
 CC establishment of sensitive RNA-dependent RNA polymerase assays to screen
 CC and evaluate antiviral inhibitors and to improve the specificity and
 CC efficacy of the inhibitors. The complex is also useful in the development
 CC of a reliable system for determining kinetic and thermodynamic constants
 CC of HCV NS5B-catalysed nucleotide incorporation and investigation of
 CC mechanistic inhibitors for mis-incorporation or chain termination.
 CC Specifically, the short RNA template and primer pairs are useful in
 CC screening assays which are used for determining kinetic, thermodynamic
 CC and mechanistic properties of NS5B replication and ultimately in the
 CC development of inhibitors of NS5B. Newly identified inhibitors of
 CC replicase activity may be used for developing anti-HCV pharmaceuticals.

```
CC Sequences ABK9271-ABK9296 represent HCV NS5B replicase RNA synthesis
CC templates
XX Sequence 21 BP; 7 A; 14 C; 0 G; 0 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 4e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCGCAGTG 250
Db 21 GTGGTGGTGGTGGTGGTG 1

RESULT 193
ABL44421
ID ABL44421 standard; DNA; 21 BP.
XX
XX ABL44421;
XX
DT 11-APR-2002 (first entry)
XX
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:1465.
XX
KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
XX JF2001321190-A.
XX
PD 20-NOV-2001.
XX
XX 12-MAR-2001; 2001JP-00068285.
XX
XX 10-MAR-2000; 2000JP-00066716.
XX
XX (RIKA ) RIKAGAKU KENKYUSHO.
XX (GENO-) GENOTEX YG.
XX
XX WPI; 2002-144136/19.
XX
XX Arraying genome clones.
XX
XX Claim 4; Page 33; 528pp; Japanese.
XX

The present invention describes a method of arraying genome clones. The
method comprises: (a) clones of the genomic libraries contained in
multiwell plates numbered for discrimination are mixed in each of the
multiwell plates; (b) a primer designed based on the chromosome marker
sequence is added to the mixture to carry out an amplification reaction;
(c) a signal corresponding to the marker is detected from the resultant
amplified product to specify the discrimination Nos. of the multiwell
plates containing the clones having said marker sequence; (d) the order
of the markers is changed so that the same discrimination Nos. succeed to
the maximum in the specified discrimination Nos. to array the multiwell
plates; (e) the clones in the multiwell plates of the specified
discrimination Nos. are mixed respectively in each wells of longitudinal
and lateral directions; (f) the mixed clones are cultured and the
resultant cultures are amplified by using the above primer; (g) signals
are detected from the amplified products; (h) the clones in the multiwell
plates are specified from the detected result; and (i) the clones are
reconstituted as the positions on the chromosome and arrayed. The
microarray is useful for gene analysis. ABL42957 to ABL45322 represent
PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
represent PCR primers for human chromosome 21q22.1, which are
specifically claimed for use in the present invention

XX Sequence 21 BP; 5 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 4e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY 1140 CTCCACTCAGATTGACATGTG 1160
Db 1 CTCCACTCAGATGACATCTG 21

RESULT 194
ABT34114/c
ID ABT34114 standard; DNA; 21 BP.
XX
XX ABT34114;
XX
DT 29-MAY-2003 (first entry)
XX
DE Human pigmentation trait-related PCR primer - SEQ ID No 213.
XX
KW Human; single nucleotide polymorphism; SNP; ss; melanocortin-1 receptor;
KW genetic pigmentation trait; MC1R; agouti signaling protein; ASIP; race;
KW hair colour; eye colour; forensic tool; PCR; primer.
XX
OS Homo sapiens.
XX
XX WO200297047-A2.
XX
PD 05-DEC-2002.
XX
XX 28-MAY-2002; 2002WO-US016789.
XX
XX 25-MAY-2001; 2001US-0293560P.
XX 21-JUN-2001; 2001US-0300187P.
XX 07-AUG-2001; 2001US-0310781P.
XX 17-SEP-2001; 2001US-0323662P.
XX 26-OCT-2001; 2001US-0344418P.
XX 05-NOV-2001; 2001US-0334574P.
XX 12-JAN-2002; 2002US-0346303P.
XX
XX (DNAP-) DNAPRINT GENOMICS INC.
XX
XX Fridakis T;
XX
XX WPI; 2003-239091/23.
XX

Inferring genetic pigmentation trait such as hair/eye color or shade from
nucleic acid sample of human subject, by identifying a pigmentation-
related haplotype allele of a pigmentation gene in the sample.

XX Example 17; Page 248; 396pp; English.
XX

The invention comprises a method for inferring a genetic pigmentation
trait of a human. The method involves identifying a single nucleotide
polymorphism (SNP) in a pigmentation gene - where the pigmentation gene
is not melanocortin-1 receptor (MC1R) and agouti signaling protein
(ASIP). The method of the invention is useful for inferring a genetic
pigmentation trait of a human, especially for inferring the race of a
human subject. The method is useful for inferring a genetic pigmentation
trait such as hair shade or colour, or eye shade or colour of a human
subject. The method may be used as a forensic tool for obtaining crime
information relating to physical characteristics of a potential crime
victim or a perpetrator of a crime from a nucleic acid sample present at
the crime scene. The present PCR primer is used in the exemplification of
the invention

XX Sequence 21 BP; 5 A; 8 C; 2 G; 6 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 4e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 863 TGAAGCAGTACCTGGATGACT 883
Db 21 TGAAGCAGTACATGGGTGACT 1
```



```
XX DT 07-JAN-2002 (first entry)
XX DE Human CETP DNA related PCR primer.
XX XX
XX KW CETP; arteriosclerosis; cholesterol ester transfer protein; HDL;
XX KW high density lipoprotein; human; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200171032-A1.
XX XX
XX PD 27-SEP-2001.
XX XX
XX PF 23-MAR-2001; 2001WO-JP002327.
XX XX
XX PR 24-MAR-2000; 2000JP-00084264.
XX XX
XX PA (BMLB-) BML INC.
XX PI Nagano M, Ito M, Sagehashi Y, Hattori H, Egashira T, Yamashita S;
XX PI Matsuzawa Y;
XX XX
XX DR WPI; 2001-611516/70.
XX XX
XX PT Determining a risk factor for arteriosclerosis comprises detecting
XX PT mutations in genes for cholesterol ester transfer protein.
XX XX
XX PS Disclosure; Page 20; 58pp; Japanese.
XX XX
XX CC The invention relates to detecting the risk factor for arteriosclerosis
XX CC in a subject that involves detecting mutations in the gene for
XX CC cholesterol ester transfer protein (CETP) related to the degree of risk
XX CC of arteriosclerosis. The mutant proteins alter the level of HDL in the
XX CC blood. The high frequency mutations can be detected for prevention and
XX CC treatment of arteriosclerosis. Sequences AA16655-91 represent PCR
XX CC primers related to the human CETP DNA, used during the course of the
XX CC invention
XX SQ Sequence 22 BP; 5 A; 12 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 4.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 232 GGTGGTGGTGGCGGCGAGTGAC 252
DB 22 GGTGGTGGTGGGGGAACTGAC 2
RESULT 198
ABZ99041/c
ID ABZ99041 standard; DNA; 22 BP.
XX AC ABZ99041;
XX XX
XX DT 17-OCT-2003 (first entry)
XX DE Human PDE4A-MTA oligonucleotide sequence.
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX KW antisthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX KW adenosine receptor; bronchodilation; respiratory disease; lung allergy;
XX KW lung inflammation; bronchoconstriction; ds.
XX OS Homo sapiens.
XX XX
XX PN WO200285308-A2.
XX XX
XX PD 31-OCT-2002.
XX XX
```

```
PF 23-APR-2002; 2002WO-US013135.
XX XX
XX PR 24-APR-2001; 2001US-0286137P.
XX XX
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX XX
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX PI Miller S, Tang L, Shahabuddin S;
XX XX
XX DR WPI; 2003-229219/22.
XX XX
XX PT Pharmaceutical composition for treating ailments associated with impaired
XX PT respiration, has oligo(s) antisense to specific gene(s) or its
XX PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX PT ubiquinone.
XX XX
XX PS Disclosure; SEQ ID NO 14283; 872pp; English.
XX XX
XX CC The invention relates to a novel pharmaceutical composition, which has a
XX CC first active agent comprising an oligonucleotide antisense to the
XX CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX CC junctions of genes encoding a polypeptide associated with lung and/or
XX CC nasal airway dysfunction and a second active agent comprising an
XX CC antiinflammatory steroid and ubiquinone. A composition of the invention
XX CC has antiinflammatory, antiallergic, antisthmatic, hypotensive,
XX CC immunosuppressive, and cytostatic activity. The composition may have a
XX CC use in antisense gene therapy. The composition is useful for treating or
XX CC preventing a respiratory, lung or malignant disease or condition, also
XX CC for enhancing the prophylactic or therapeutic respiratory effect of an
XX CC antiinflammatory steroid in a subject, for reducing or depleting levels
XX CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX CC receptor, producing bronchodilation, increasing levels of ubiquinone or
XX CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX CC lung inflammation, lung allergies, or a respiratory disease or condition.
XX CC Note: The sequence data for this patent is not represented in the printed
XX CC specification, but was obtained in electronic format directly from WIPO
XX CC at ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
Query Match 0.9%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 4.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 535 AGCCCATCTTTGACAAAGCCC 555
DB 22 AGCCCATCTGTGACAAAGCAC 2
RESULT 199
ABD32072/c
ID ABD32072 standard; DNA; 22 BP.
XX AC ABD32072;
XX XX
XX DT 29-JUL-2004 (first entry)
XX DE Human PDE4A-MTA-derived oligonucleotide SEQ ID 14283.
XX KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX KW surfactant depletion; antiallergic; antiinflammatory; antisthmatic;
XX KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX KW pulmonary transplantation rejection; ss; primer.
XX OS Homo sapiens.
XX XX
XX PN WO200285309-A2.
XX XX
```

PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 14283; 763pp; English.
 PS
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 XX Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
 SQ

Query Match 0.9%; Score 16.2; DB 1; Length 22;
 Best Local Similarity 85.7%; Pred. No. 4.1e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 535 AGCCCCATCTTGACAGCCC 555
 Db 22 AGCCCCATGTGTGACAGCAC 2
 RESULT 200
 ADJ61300/c
 ID ADJ61300 standard; DNA; 22 BP.
 XX AC ADJ61300;
 XX
 XX 06-MAY-2004 (first entry)
 DT Oligonucleotide associated to PDE4D #2.
 DE
 XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
 KW

KW airway inflammation; allergy; asthma; impeded respiration;
 KW cystic fibrosis; acute respiratory distress syndrome;
 KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
 XX ss.
 XX Homo sapiens.
 XX
 PN WO2004011613-A2.
 XX
 PD 05-FEB-2004.
 XX
 XX 25-JUL-2003; 2003WO-US023509.
 XX
 XX 29-JUL-2002; 2002US-0399076P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 PI
 XX WPI; 2004-203534/19.
 DR
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.,
 PT initiation codons and introns of respiratory disease-relevant genes e.g.,
 PT CCRI, RANTES, MCP4, useful for prophylaxis or treating respiratory
 PT disease e.g., asthma.
 XX
 PS Claim 2; SEQ ID NO 2156; 85pp; English.
 XX
 CC The present invention relates to an oligonucleotide anti-sense to e.g.,
 CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
 CC end of nucleic acid target comprising gene(s) chosen from e.g.,
 CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
 CC oligonucleotide and optionally surfactant operatively linked to the
 CC oligonucleotide. The method is useful for preventing or treating a
 CC respiratory or lung disease, which involves administering to the airways
 CC of a subject an effective amount of an inhibitor. The oligonucleotide is
 CC useful for production of a medicament for the prevention and/or treatment
 CC of a respiratory or lung disease. The respiratory or lung disease is
 CC chosen from airway inflammation, allergies, asthma, impeded
 CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
 CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
 CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
 CC obstruction. The present sequence represents an oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
 Query Match 0.9%; Score 16.2; DB 1; Length 22;
 Best Local Similarity 85.7%; Pred. No. 4.1e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 535 AGCCCCATCTTGACAGCCC 555
 Db 22 AGCCCCATGTGTGACAGCAC 2
 RESULT 201
 ADJ60924/c
 ID ADJ60924 standard; DNA; 22 BP.
 XX AC ADJ60924;
 XX
 XX 06-MAY-2004 (first entry)
 DT Oligonucleotide associated to PDE4A #207.
 XX
 DE
 XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
 KW airway inflammation; allergy; asthma; impeded respiration;
 KW cystic fibrosis; acute respiratory distress syndrome;
 KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
 XX ss.
 XX

OS Homo sapiens.
 XX WO2004011613-A2.
 XX 05-FEB-2004.
 XX 25-JUL-2003; 2003WO-US023509.
 XX 29-JUL-2002; 2002US-0399076P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 XX WPI; 2004-203534/19.
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT Initiation codons and introns of respiratory disease-relevant genes e.g.,
 PT CCRL1, RANTES, MCP4, useful for prophylaxis or treating respiratory
 PT disease e.g., asthma.
 XX Claim 2; SEQ ID NO 1780; 85pp; English.
 XX The present invention relates to an oligonucleotide anti-sense to e.g.,
 CC Initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
 CC end of nucleic acid target comprising gene(s) chosen from e.g.
 CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
 CC oligonucleotide and optionally surfactant operatively linked to the
 CC oligonucleotide. The method is useful for preventing or treating a
 CC respiratory or lung disease, which involves administering to the airways
 CC of a subject an effective amount of an inhibitor. The oligonucleotide is
 CC useful for production of a medicament for the prevention and/or treatment
 CC of a respiratory or lung disease. The respiratory or lung disease is
 CC chosen from airway inflammation, allergy(ies), asthma, impeded
 CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
 CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
 CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
 CC obstruction. The present sequence represents an oligonucleotide of the
 CC invention.
 XX SQ Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
 Query Match 0.9%; Score 16.2; DB 1; Length 22;
 Best Local Similarity 85.7%; Pred. No. 4.1e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 535 AGCCCCATCTTGCACAGCCC 555
 Db 22 AGCCCCATGTGTGACAGCAC 2
 RESULT 202
 ID ADO46413/c
 XX ADO46413 standard; DNA; 22 BP.
 XX ADO46413;
 XX 15-JUL-2004 (first entry)
 XX Human oligonucleotide #1779.
 XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
 KW CCRL1; CCRL3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
 KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
 KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
 KW asthma; lung allergy; inflammation; inflammatory disease;
 KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
 KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
 KW acute respiratory distress syndrome; COPD; pulmonary hypertension;
 KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
 XX Homo sapiens.

XX US2004049022-A1.
 XX 11-MAR-2004.
 XX 25-JUL-2003; 2003US-00627930.
 XX 23-APR-2002; 2002WO-US013135.
 XX 23-APR-2002; 2002WO-US013143.
 XX (NYCE/) NYCE J W.
 PA (SAND/) SANDRASAGRA A.
 PA (TANG/) TANG L.
 PA (AGUI/) AGUILAR D.
 PA (MILL/) MILLER S.
 PA (SHAH/) SHAHABUDDIN S.
 PA (LUHH/) LU H.
 PA (CONG/) CONG H.
 XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 XX WPI; 2004-293804/27.
 DR Novel single or multiple target oligonucleotide anti-sense to e.g.
 XX Initiation codon, intron of respiratory disease-relevant gene e.g. CCRL1,
 PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
 PT asthma.
 XX Claim 2; SEQ ID NO 1780; 174pp; English.
 XX The invention relates to oligonucleotides anti-sense to an initiation
 CC codon, coding region, 5' or 3' intron-exon junction, intron or region
 CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
 CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)-
 CC -5 receptor, CCRL1, CCRL3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
 CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
 CC also relates to a method of screening a candidate compound that binds to
 CC one or more nucleic acid target(s) or expressed product(s), for the
 CC prevention and/or treatment of a respiratory or lung disease. The
 CC oligonucleotides are useful for reducing or inhibiting expression of a
 CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
 CC CCRL1, CCRL3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
 CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
 CC useful for preventing or treating a respiratory or lung disease. The
 CC respiratory or lung disease is associated with hyper-responsiveness to
 CC and/or increased levels of, adenosine and/or levels of adenosine A
 CC receptor(s), and/or asthma and/or lung allergies associated with
 CC inflammation or an inflammatory disease. The respiratory or lung disease
 CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
 CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
 CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
 CC hypertension, lung inflammation, bronchitis, airway obstruction or
 CC bronchoconstriction. This sequence represents an oligonucleotide of the
 CC invention.
 XX SQ Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
 Query Match 0.9%; Score 16.2; DB 1; Length 22;
 Best Local Similarity 85.7%; Pred. No. 4.1e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 535 AGCCCCATCTTGCACAGCCC 555
 Db 22 AGCCCCATGTGTGACAGCAC 2
 RESULT 203
 ID ADO46690/c
 XX ADO46690 standard; DNA; 22 BP.
 XX ADO46690;
 XX ADO46690;

DT 15-JUL-2004 (first entry)
XX Human oligonucleotide #2056.
XX
KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; PDE4 E; PDE4 F; PDE4 G;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
XX
PN US2004049022-A1.
XX
XX 11-MAR-2004.
XX
XX 25-JUL-2003; 2003US-00627930.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX (NYCE/) NYCE J W.
XX (SAND/) SANDRASAGRA A.
XX (TANG/) TANG L.
XX (AGUI/) AGUILAR D.
XX (MILL/) MILLER S.
XX (SHAH/) SHAHABUDDIN S.
XX (LUHH/) LU H.
XX (CONG/) CONG H.
XX
XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
XX Shahabuddin S, Lu H, Cong H;
XX WPI; 2004-293804/27.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
XX initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
XX RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
XX asthma.
XX
XX Claim 2; SEQ ID NO 2156; 174pp; English.
XX
XX The invention relates to oligonucleotides anti-sense to an initiation
XX codon, coding region, 5' or 3' intron-exon junction, intron or region
XX with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
XX chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
XX -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
XX tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
XX also relates to a method of screening a candidate compound that binds to
XX one or more nucleic acid target(s) or expressed product(s), for the
XX prevention and/or treatment of a respiratory or lung disease. The
XX oligonucleotides are useful for reducing or inhibiting expression of a
XX gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
XX CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, tryptase a,
XX tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
XX useful for preventing or treating a respiratory or lung disease. The
XX respiratory or lung disease is associated with hyper-responsiveness to
XX and/or increased levels of, adenosine and/or levels of adenosine A
XX receptor(s), and/or asthma and/or lung allergies associated with
XX inflammation or an inflammatory disease. The respiratory or lung disease
XX is chosen from airway inflammation, allergy, asthma, impeded respiration,
XX cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
XX allergic rhinitis, acute respiratory distress syndrome, pulmonary
XX hypertension, lung inflammation, bronchitis, airway obstruction or
XX bronchoconstriction. This sequence represents an oligonucleotide of the
XX invention.
XX
XX Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 4.1e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 535 AGCCCCATCTTGTGACAGGCC 555
DB 22 AGCCCCATCTTGTGACAGCAC 2
RESULT 204
AAA64536/c
ID AAA64536 standard; DNA; 23 BP.
XX
XX AAA64536;
XX
XX 02-JAN-2001 (first entry)
XX
XX PCR primer G6 used to amplify exon 2 of human FEZ1 gene.
XX
XX Human; FEZ1 gene; tumour suppressor gene; 8p22; cancer; tumour growth;
XX tumour proliferation; tubulin; microtubule; protein EF1-gamma;
XX tubulin polymerisation disorder; mitosis initiation; cell proliferation;
XX cell growth; cell shape; cell rigidity; cell motility; DNA replication;
XX tumorigenesis; tumour survival; metastasis; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200050565-A2.
XX
XX 31-AUG-2000.
XX
XX 25-FEB-2000; 2000WO-US004950.
XX
XX 25-FEB-1999; 99US-0121537P.
XX (UYJE-) UNIV JEFFERSON THOMAS.
XX
XX Croce CM, Ishii H;
XX
XX WPI; 2000-558396/51.
XX
XX New polynucleotide homologous with a portion of one strand of the human
XX FEZ1 gene, useful for alleviating abnormal cell proliferation such as
XX cancer.
XX
XX Example 1; Page 45; 255pp; English.
XX
XX PCR primers AAA64535-36 were used to amplify a fragment of the human FEZ1
XX gene. FEZ1 is a tumour suppressor gene, located at chromosome location
XX 8p22. Decreased or no expression of FEZ1 is detected in a variety of
XX cancer cells. Expression of FEZ1 inhibits tumour growth and
XX proliferation. FEZ1 also interacts with tubulin, with microtubules, and
XX with protein EF1-gamma. Post-translational phosphorylation and
XX dephosphorylation modulates the effect of the FEZ1 protein. Inhibitors of
XX FEZ1 gene expression are useful for inducing cells to proliferate.
XX Compounds which modulate FEZ1 association with tubulin are useful for
XX alleviating tubulin hyper- or hypo- polymerisation disorders, such as
XX those associated with aberrant initiation of mitosis, modulation of the
XX initiation and rate of cell proliferation and cell growth, modulation of the
XX cell shape, cell rigidity, cell motility, rate and stage of cellular DNA
XX replication, intracellular distribution of organelles, metastatic
XX potential of cell and cellular transformation from a non-cancerous to
XX cancerous phenotype. Compounds which modulate FEZ1 binding and
XX phosphorylation are also useful for alleviating a disorder, such as
XX tumorigenesis, tumour survival, growth and metastasis
XX
XX Sequence 23 BP; 3 A; 8 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 16.2; DB 1; Length 23;
Best Local Similarity 85.7%; Pred. No. 4.3e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 850 CTGGACAGGACCTGACGAC 870

```

Db      23 CTGGAGAGGCGCTCGCAGCAG 3
      ||||| |||| |||| |||| |||||
RESULT 205
ABA82542
ID ABA82542 standard; DNA; 24 BP.
XX
AC ABA82542;
XX
DT 25-JAN-2002 (first entry)
XX
DE Zmax1 gene region physical map preparation STS marker #501.
XX
KW Human; high bone mass; HBM gene; Zmax1 gene; chromosome 11; 11q13.3;
KW sequence tagged site; STS; osteoporosis; osteopathic; gene therapy;
KW antisense therapy; vaccine; bone disorder; Paget's disease; adapter;
KW sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200177327-A1.
XX
PD 18-OCT-2001.
XX
PF 21-JUN-2000; 2000WO-US016951.
XX
PR 05-APR-2000; 2000US-00543771.
PR 05-APR-2000; 2000US-00544398.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
XX
PI Carulli JP, Little RD, Recker RR, Johnson ML;
XX
DR WPI; 2001-657171/75.
XX
KW New high bone mass (HBM) and Zmax1 genes and proteins useful for
PT modulating bone mass for the treatment of e.g. osteoporosis.
XX
PS Disclosure; Page 37; 443pp; English.
XX
CC The present invention describes the human Zmax1 gene and the high bone
CC mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 and HBM
CC genes have osteopathic activities. The genes can be used in gene therapy,
CC antisense therapy and in the production of vaccines. They can be used in
CC the diagnosis and treatment of bone disorders including osteoporosis,
CC Paget's disease, sclerostosis, osteomalacia and fibrous dysplasia.
CC ABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used in
CC the exemplification of the present invention
XX
SQ Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 4.5e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      862 CTGACGACTACCTGGTATGAC 882
DB      1 CTGACCACTACCTGTATGAC 21
      ||||| ||||| ||||| |||||
RESULT 206
ABS55758/C
ID ABS55758 standard; DNA; 24 BP.
XX
AC ABS55758;
XX
DT 22-JAN-2003 (first entry)
XX
DE Human p70 ribosome S6 kinase 26.29 RT-PCR primer #1.
XX
KW Human p70 ribosome S6 kinase 26.29; human; malignant tumour;

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KW inflammation; immunological disease; haemopathy;
KW HIV human immunodeficiency virus; reverse transcriptase PCR; RT-PCR;
KW primer; ss.
XX
OS Homo sapiens.
XX
PN CN1347994-A.
XX
PD 08-MAY-2002.
XX
PF 11-OCT-2000; 2000CN-00125684.
XX
PR 11-OCT-2000; 2000CN-00125684.
XX
PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI Mao Y, Xie Y;
XX
DR WPI; 2002-549001/59.
XX
KW New polypeptide human p70 ribosome S6 kinase 26.29 and encoding
PT polynucleotides for treating malignant tumors, inflammations,
PT immunological diseases, hemopathy and human immunodeficiency virus
PT infection.
XX
PS Example 2; Page 17 (Disclosure); 34pp; Chinese.
XX
CC The present invention discloses one new kind of polypeptide, human p70
CC ribosome S6 kinase 26.29, polynucleotides encoding this polypeptide and
CC DNA recombination process to produce the polypeptide. The present
CC invention also discloses the method of applying the polypeptide in
CC treating various diseases, such as malignant tumours, inflammations,
CC immunological diseases, haemopathy and human immunodeficiency virus
CC infection (HIV). The present invention also discloses the antagonist
CC resisting the polypeptide and its treatment effect, and the application
CC of the polynucleotides encoding human p70 ribosome S6 kinase 26.29. This
CC sequence represents a reverse transcriptase PCR primer used to isolate
CC cDNA encoding the human p70 ribosome S6 kinase 26.29
XX
SQ Sequence 24 BP; 4 A; 7 C; 11 G; 2 T; 0 U; 0 Other;

Query Match      0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 4.5e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      97 GTTGCTCGCGCGCCCGCGCG 117
DB      21 GCTTCTCGCGCGCTCCCGCG 1
      ||||| ||||| ||||| |||||
RESULT 207
ABK23339
ID ABK23339 standard; DNA; 24 BP.
XX
AC ABK23339;
XX
DT 09-APR-2002 (first entry)
XX
DE Human Zmax1 cDNA forward PCR primer #251.
XX
KW Human; mouse; Zmax1; HBM; high bone mass gene; lipid regulation; stroke;
KW lipid-associated condition; arteriosclerosis; cardiovascular disease; ss;
KW osteoporosis; atherosclerosis; diabetic atherosclerosis; plaque build-up;
KW neurovascular condition; wound healing; gene therapy; PCR primer; probe;
KW bone development disorder; antiarteriosclerotic; cardiovascular;
KW osteopathic; cerebroprotective.
XX
OS Homo sapiens.
XX
PN WO200192891-A2.
XX
PD 06-DEC-2001.
XX

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PF 25-MAY-2001; 2001WO-US016946.
XX
XX
XX 26-MAY-2000; 2000US-00578900.
XX
XX (GENO-) GENOME THERAPEUTICS CORP.
XX (UYCR-) UNIV CREIGHTON SCHOOL MEDICINE.
PA
XX Carulli JP, Little RD, Recker RR, Johnson ML;
XX
XX WPI; 2002-097784/13.
XX
XX Identifying molecules involved in lipid regulation, useful for
PT diagnosing, treating or preventing e.g., arteriosclerosis, comprises
PT identifying a molecule that binds to high bone mass gene or its
PT corresponding wild type gene.
XX
XX Disclosure; Page 42; 409pp; English.
XX
XX The invention relates to a method for identifying a molecule involved in
CC lipid regulation comprising identifying a molecule that binds to or
CC inhibits binding of a molecule to high bone mass (HBM) or its wild type
CC gene, Zmax1. Compounds identified by the method are useful for treating,
CC diagnosing, preventing or screening for normal and abnormal lipid-
CC associated conditions, including arteriosclerosis, cardiovascular
CC disease, stroke, and osteoporosis. The compounds may also be used in the
CC treatment or prevention of diabetic atherosclerosis, neurovascular
CC conditions caused by plaque build-up, poor circulation due to plaque
CC build-up and associated poor wound healing. The methods may be used in
CC gene therapy, pharmaceutical development, and diagnostic assays for bone
CC development disorders. Molecules identified by comparison of Zmax1 and
CC HBM systems can be used as surrogate markers in pharmaceutical
CC development, in diagnosis of human or animal bone disease, and in the
CC treatment of bone diseases. Sequences ABK22776-ABK23411 represent cDNA
CC molecules encoding human Zmax1 and HBM, and PCR primers, probes, linkers
CC and adapters of the invention
XX
XX Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 4.5e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 862 CTGAAGCAGTACCTGGATGAC 882
Db 1 CTGAACCACTACCTGTATGAC 21
RESULT 208
ACC45922
ID ACC45922 standard; DNA; 24 BP.
XX
XX ACC45922;
AC
XX 02-JUN-2003 (first entry)
DT
XX
XX Human HBM STS marker forward primer #251.
DE
XX Human; high bone mass; HBM; LRP5; LRP6; transgenic; bone mass modulation;
KW gene therapy; bone density modulation; bone strength; trabecular number;
KW bone size; bone tissue connectivity; bone disease; osteoporosis; PCR;
KW osteomalacia; rickets; Paget's disease; neoplasm of the bone; primer; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200292764-A2.
FN
XX
XX 21-NOV-2002.
PD
XX
XX 13-MAY-2002; 2002WO-US014876.
PF
XX
XX 11-MAY-2001; 2001US-0290071P.
PR
XX 17-MAY-2001; 2001US-0291311P.
PR
XX 01-FEB-2002; 2002US-0353058P.
PR
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PR 04-MAR-2002; 2002US-0361293P.
XX
XX (GENO-) GENOME THERAPEUTICS CORP.
XX (AMHP ) WYETH.
XX
XX Babij P, Bex FJ, Yaworsky PJ, Bodine PV;
XX
XX WPI; 2003-129278/12.
XX
XX New transgenic animals (e.g. mice), useful as models for studying bone
PT density modulation, developing drugs for treating or preventing bone
PT diseases (e.g. osteoporosis), or diagnosing diseases characterized by
PT reduced bone density.
XX
XX Disclosure; Page 58; 603pp; English.
XX
XX The invention relates to novel transgenic animals expressing the high
CC bone mass (HBM) gene, expressing the corresponding wild type HBM gene,
CC comprising an alteration of the gene encoding LRP5 or LRP6, or expressing
CC an LRP5 that is modulated by an altered gene control sequence introduced
CC by homologous or non-homologous recombination. The transgenic animals are
CC for the study of bone density modulation or bone mass modulation. The
CC invention has osteopathic and cytostatic activity. The polynucleotides of
CC the invention may have a use in gene therapy. The transgenic animals and
CC nucleic acids are for the study of bone density modulation, where the
CC bone mass is modulated relative to non-transgenic animals of the same
CC species in more than one parameter selected from bone density, bone
CC strength, trabecular number, bone size, or bone tissue connectivity. The
CC transgenic animals, nucleic acids and methods are useful for identifying
CC molecules involved in bone development, and for developing pharmaceutical
CC compositions, which may be employed for treating or preventing bone
CC diseases, e.g. osteoporosis, osteomalacia, rickets, Paget's disease, or
CC neoplasms of the bone. The transgenic animals and nucleic acids are also
CC useful in methods for diagnosing diseases involved in bone development,
CC or characterised by reduced bone density or mass. The present sequence is
CC used in the exemplification of the invention
XX
XX Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 4.5e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 862 CTGAAGCAGTACCTGGATGAC 882
Db 1 CTGAACCACTACCTGTATGAC 21
RESULT 209
ADB98620
ID ADB98620 standard; DNA; 24 BP.
XX
XX ADB98620;
AC
XX 04-DEC-2003 (first entry)
DT
XX
XX Sequence tagged site #501 used to prepare Zmax1 (LRP5) gene region map.
DE
XX Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;
KW bone mass modulation; osteoporosis; STS; sequence tagged site; ds.
XX
XX Homo sapiens.
OS
XX
XX WO200292000-A2.
FN
XX
XX 21-NOV-2002.
PD
XX
XX 13-MAY-2002; 2002WO-US014877.
PF
XX
XX 11-MAY-2001; 2001US-0290071P.
PR
XX 17-MAY-2001; 2001US-0291311P.
PR
XX 01-FEB-2002; 2002US-0353058P.
PR
XX 04-MAR-2002; 2002US-0361293P.
PR
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XX (GENO-) GENOME THERAPEUTICS CORP.
PA (AMHP ) WYETH.
XX
XX Allen K, Anisowicz A, Graham JR, Morales A, Yaworsky PJ, Liu W;
XX WPI; 2003-129214/12.
XX
XX New nucleic acid comprising a mutation in LRP5 or LRP6, useful for
XX diagnosing a HBM-like phenotype in a subject and for preparing a
XX composition for modulating bone mass and/or lipid levels in a subject
XX suffering from e.g. osteoporosis.
XX
XX Example 2; Page 64; 629pp; English.
XX
XX The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and
XX LRP6 mutants, which results in a HBM-like phenotype when expressed in a
XX cell. The HBM-like phenotype results in bone mass modulation and/or lipid
XX level modulation. The invention is useful for diagnosing a HBM-like
XX phenotype in a subject and for preparing a composition for modulating
XX bone mass and/or lipid levels in a subject suffering from e.g.
XX osteoporosis. The present sequence is a Sequence Tagged Site (STS)
XX marker, which was used to prepare a physical map of the Zmax1 (LRP5) gene
XX region.
XX
XX Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
XX
SQ Query Match 0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 4.5e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 862 CTGACGACGTACTCGATGAC 882
DB 1 CTGACACACTACCTGTATGAC 21
|||||
RESULT 210
AD023075
ID ADO23075 standard; cDNA; 19 BP.
XX
XX ADO23075;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human cyclin-dependent kinase 2, SDO target region #5.
XX
XX Human; ss; SDO; short double stranded oligonucleotide; cleavage site;
XX viral infection; malignant tumour; genetic disease; metabolic disease;
XX gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;
XX Hepatogene; Leukogene; Lymphogene; Prostagene; Breastogene;
XX Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;
XX RNA interference.
XX
XX Homo sapiens.
XX
XX US2004072769-A1.
XX
XX 15-APR-2004.
XX
XX 16-SEP-2002; 2002US-00016490.
XX
XX 16-SEP-2002; 2002US-00016490.
XX
XX (VINJ/) YIN J Q.
XX
XX Yin JQ;
XX
XX WPI; 2004-355427/33.
XX
XX Designing and selecting short double-stranded oligonucleotides for
XX treating viral infections, cancer and genetic or metabolic diseases,
XX comprises using gene chip and protein chip microarrays to identify
XX specific DNA sequences.
XX
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XX
XX Example 1; Page 19; 58pp; English.
XX
XX The invention relates to screening, identifying or predicting, and
XX assembling 19-25 nt double-stranded oligonucleotides (termed short double
XX stranded oligonucleotides, SDO) as active pharmaceutical compositions
XX for the treatment of viral infections, malignant tumours, and genetic and
XX metabolic diseases, comprising screening and identifying a specific DNA
XX sequence in an abnormal gene encoding a protein with gene chip and
XX protein chip microarrays. The above method comprises screening the
XX disease-causing genes, over-expressing in cells and/or tissues, with the
XX gene chip and protein chip microarrays, identifying a specific DNA
XX sequence within the abnormal gene encoding a protein or playing other
XX biological roles with the assistance of computer and specific software,
XX predicting efficacious 19-25 nt double-stranded oligonucleotides with a
XX 5'-AU(T)CCG-3' or 5'-U(T)CCG-3' special pattern complementary to at
XX least a portion of an RNA molecule and making sure that selected sequence
XX is not localised within the stem-loop of target mRNA with any related
XX software. Also included are pharmaceutical compositions of gene drugs
XX (such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene,
XX Prostagene, Breastogene, Braintumogene and Skin-whitogene including but
XX being not limited to part or all of the following components: single or a
XX group of specific 19-25 nt dsRNA, 19-25 nt srRNA-cDNA, 19-25 nt dsRNA
XX and/or single-stranded RNA and/or DNA with the special pattern, 5'-
XX CCGAT(U)-3' or its derivatives, one or more nucleic acid condensation
XX agents (or none), one or more pharmaceutical carriers, one or more
XX specific cell-targeting proteins and other active agents and additional
XX materials) and a simplified method for predicting and selecting a
XX specific and efficacious small double-stranded oligonucleotides (SDSO),
XX antisense oligonucleotide molecules or short interfering RNA (siRNA),
XX (comprising identifying a special pattern that can be localised in any
XX position of an oligonucleotide sequence evaluating the specificity of a
XX selected sequence). The short interfering RNA (siRNA) are targeted
XX against genes involved in viral infection, malignant tumours, genetic and
XX metabolic diseases. The methods are useful for designing and selecting
XX short double-stranded oligonucleotides as a gene drug that can
XX specifically inactivate a group of corresponding genes. The composition
XX may be used for treating diseases or disorders associated with abnormal
XX expression of genes in cells or tissues of humans or animals, such as
XX viral infections, cancer, or genetic or metabolic diseases. The present
XX sequence is a target region for an SDO from an human cDNA.
XX
XX Sequence 19 BP; 2 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
XX
SQ Query Match 0.9%; Score 16; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 3.9e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 922 CTGTTCCAGTGCTCC 937
DB 2 CTGTTCCAGTGCTCC 17
|||||
RESULT 211
AAAT67065/C
ID AAAT67065 standard; DNA; 20 BP.
XX
XX AAAT67065;
XX
XX 06-AUG-1997 (first entry)
XX
XX Soluble type I insulin-like growth factor receptor 3' PCR primer.
XX
XX Type I insulin-like growth factor receptor; IGF-1R; tumour; melanoma;
XX prostate cancer; ovary cancer; breast cancer; lung cancer;
XX smooth muscle cancer; apoptosis; gene therapy; primer; PCR;
XX polymerase chain reaction; ss.
XX
XX Synthetic.
XX
XX WO9718241-A1.
XX
XX 22-MAY-1997.
XX
```



```
Db 1 TACTCCAGTACCGAGCAATGCC 24
RESULT 214
ABI83145
ID ABI83145 standard; DNA; 24 BP.
XX AC
XX AC
XX DT 15-FEB-2002 (first entry)
XX DE
XX DE Capture oligonucleotide Zip ID#374 oligo #2.
XX Human: K-ras; PCR primer; probe; capture probe; mutation detection;
XX ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
XX infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
XX oncogene; tumour suppressor; human papillomavirus; forensic;
XX environmental monitoring; food industry; feed industry; ss.
XX OS Synthetic.
XX PN WO200179548-A2.
XX PD 25-OCT-2001.
XX PF 04-APR-2001; 2001WO-US010958.
XX PR 14-APR-2000; 2000US-0197271P.
XX PA (CORR ) CORNELL RES FOUND INC.
XX PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX WPI; 2002-034366/04.
XX Designing capture oligonucleotide probes for use on a support to which
XX complementary oligonucleotides hybridize with little mismatch.
XX Example 5; Fig 25; 300pp; English.
XX The present invention describes a method (M1) for designing capture
XX oligonucleotide probes (I) for use on a support to which complementary
XX oligonucleotide probes (II) will hybridize with little mismatch, where
XX (I) have melting temperatures within a narrow range. The method is useful
XX for detecting infectious diseases caused by bacterial infectious agents
XX e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
XX infectious agents e.g. Cryptococcus neoformans, Candida albicans and
XX Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
XX Epstein-Barr virus and polio virus, and parasitic infectious agents
XX selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
XX medinensis. The method is also useful for detecting genetic diseases such
XX as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
XX Detecting cancer involving oncogenes, tumour suppressor genes, or genes
XX involved in DNA amplification, replication, recombination or repair, the
XX cancer is specifically associated with a gene selected from BRCA1 gene,
XX p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
XX method is also used for environmental monitoring, forensics and the food
XX and feed industry, detecting comprises scanning (using e.g. a scanning
XX electron microscope and infrared microscope) the support at the
XX particular sites and identifying if ligation of the oligonucleotide probe
XX sets occurred and correlating (using a computer) identified ligation to a
XX presence or absence of the target nucleotide sequences. ABI82074 to
XX ABI97546 represent oligonucleotide sequences used in the exemplification
XX of the present invention
XX Sequence 24 BP; 8 A; 6 C; 8 G; 2 T; 0 U; 0 Other;
XX Query Match 0.9%; Score 16; DB 1; Length 24;
XX Best Local Similarity 79.2%; Pred. No. 4.9e+02;
XX Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 994 AACCTGCTCATCACGAGGGGA 1017
||| ||||||| ||||| |||||
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```
Db 1 TACTCCAGTACCGAGCAATGCC 24
RESULT 215
ABI92410/C
ID ABI92410 standard; DNA; 24 BP.
XX AC
XX AC
XX DT 15-FEB-2002 (first entry)
XX DE
XX DE Capture oligonucleotide Zip ID#374 oligo #3.
XX Human: K-ras; PCR primer; probe; capture probe; mutation detection;
XX ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
XX infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
XX oncogene; tumour suppressor; human papillomavirus; forensic;
XX environmental monitoring; food industry; feed industry; ss.
XX OS Synthetic.
XX PN WO200179548-A2.
XX PD 25-OCT-2001.
XX PF 04-APR-2001; 2001WO-US010958.
XX PR 14-APR-2000; 2000US-0197271P.
XX PA (CORR ) CORNELL RES FOUND INC.
XX PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX WPI; 2002-034366/04.
XX Designing capture oligonucleotide probes for use on a support to which
XX complementary oligonucleotides hybridize with little mismatch.
XX Claim 3; Fig 26; 300pp; English.
XX The present invention describes a method (M1) for designing capture
XX oligonucleotide probes (I) for use on a support to which complementary
XX oligonucleotide probes (II) will hybridize with little mismatch, where
XX (I) have melting temperatures within a narrow range. The method is useful
XX for detecting infectious diseases caused by bacterial infectious agents
XX e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
XX infectious agents e.g. Cryptococcus neoformans, Candida albicans and
XX Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
XX Epstein-Barr virus and polio virus, and parasitic infectious agents
XX selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
XX medinensis. The method is also useful for detecting genetic diseases such
XX as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
XX Detecting cancer involving oncogenes, tumour suppressor genes, or genes
XX involved in DNA amplification, replication, recombination or repair, the
XX cancer is specifically associated with a gene selected from BRCA1 gene,
XX p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
XX method is also used for environmental monitoring, forensics and the food
XX and feed industry, detecting comprises scanning (using e.g. a scanning
XX electron microscope and infrared microscope) the support at the
XX particular sites and identifying if ligation of the oligonucleotide probe
XX sets occurred and correlating (using a computer) identified ligation to a
XX presence or absence of the target nucleotide sequences. ABI82074 to
XX ABI97546 represent oligonucleotide sequences used in the exemplification
XX of the present invention
XX Sequence 24 BP; 2 A; 8 C; 6 G; 8 T; 0 U; 0 Other;
XX Query Match 0.9%; Score 16; DB 1; Length 24;
XX Best Local Similarity 79.2%; Pred. No. 4.9e+02;
XX Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 994 AACCTGCTCATCACGAGGGGA 1017
||| ||||||| ||||| |||||
```

Db 24 AACGGGCTCATCACAGAGACGGGA 1

RESULT 216

ABI83144/C
ID ABI83144 standard; DNA; 24 BP.

AC ABI83144;

DT 15-FEB-2002 (first entry)

DE Capture oligonucleotide Zip ID#374 oligo #1.

Human; K-tas; PCR primer; probe; capture probe; mutation detection;
ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
oncogene; tumour suppressor; human papillomavirus; forensic;
environmental monitoring; food industry; feed industry; ss.

OS Synthetic.

FN WO200179548-A2.

PD 25-OCT-2001.

PF 04-APR-2001; 2001WO-US010958.

PR 14-APR-2000; 2000US-0197271P.

PA (CORR) CORNELL RES FOUND INC.

PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;

DR WPI; 2002-034366/04.

PT Designing capture oligonucleotide probes for use on a support to which
complementary oligonucleotides hybridize with little mismatch.

PS Example 5; Fig 25; 300pp; English.

XX The present invention describes a method (M1) for designing capture
oligonucleotide probes (I) for use on a support to which complementary
oligonucleotide probes (II) will hybridize with little mismatch, where
(I) have melting temperatures within a narrow range. The method is useful
for detecting infectious diseases caused by bacterial infectious agents
e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
infectious agents e.g. Cryptococcus neoformans, Candida albicans and
Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
Epstein-Barr virus and polio virus, and parasitic infectious agents
selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
medinensis. The method is also useful for detecting genetic diseases such
as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
Detecting cancer involving oncogenes, tumour suppressor genes, or genes
involved in DNA amplification, replication, recombination or repair, the
cancer is specifically associated with a gene selected from BRCA1 gene,
p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
method is also used for environmental monitoring, forensics and the food
and feed industry, detecting comprises scanning (using e.g. a scanning
electron microscope and infrared microscope) the support at the
particular sites and identifying if ligation of the oligonucleotide probe
sets occurred and correlating (using a computer) identified ligation to a
presence or absence of the target nucleotide sequences. ABI82074 to
ABI97546 represent oligonucleotide sequences used in the exemplification
of the present invention

XX Sequence 24 BP; 2 A; 8 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 16; DB 1; Length 24;
Best Local Similarity 79.2%; Pred. No. 4.9e+02;
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 994 AACCTGCTCATCACAGAGACGGGA 1017
||| ||||||| ||||| |||||

Db 24 AACGGGCTCATCACAGAGACGGGA 1

RESULT 217

ABI92411
ID ABI92411 standard; DNA; 24 BP.

XX AC ABI92411;

XX DT 15-FEB-2002 (first entry)

XX DE Capture oligonucleotide Zip ID#374 oligo #4.

Human; K-tas; PCR primer; probe; capture probe; mutation detection;
ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
oncogene; tumour suppressor; human papillomavirus; forensic;
environmental monitoring; food industry; feed industry; ss.

OS Synthetic.

FN WO200179548-A2.

PD 25-OCT-2001.

PF 04-APR-2001; 2001WO-US010958.

PR 14-APR-2000; 2000US-0197271P.

XX (CORR) CORNELL RES FOUND INC.

XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;

XX WPI; 2002-034366/04.

PT Designing capture oligonucleotide probes for use on a support to which
complementary oligonucleotides hybridize with little mismatch.

XX Claim 3; Fig 26; 300pp; English.

XX The present invention describes a method (M1) for designing capture
oligonucleotide probes (I) for use on a support to which complementary
oligonucleotide probes (II) will hybridize with little mismatch, where
(I) have melting temperatures within a narrow range. The method is useful
for detecting infectious diseases caused by bacterial infectious agents
e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
infectious agents e.g. Cryptococcus neoformans, Candida albicans and
Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
Epstein-Barr virus and polio virus, and parasitic infectious agents
selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
medinensis. The method is also useful for detecting genetic diseases such
as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
Detecting cancer involving oncogenes, tumour suppressor genes, or genes
involved in DNA amplification, replication, recombination or repair, the
cancer is specifically associated with a gene selected from BRCA1 gene,
p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
method is also used for environmental monitoring, forensics and the food
and feed industry, detecting comprises scanning (using e.g. a scanning
electron microscope and infrared microscope) the support at the
particular sites and identifying if ligation of the oligonucleotide probe
sets occurred and correlating (using a computer) identified ligation to a
presence or absence of the target nucleotide sequences. ABI82074 to
ABI97546 represent oligonucleotide sequences used in the exemplification
of the present invention

XX Sequence 24 BP; 8 A; 6 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.9%; Score 16; DB 1; Length 24;
Best Local Similarity 79.2%; Pred. No. 4.9e+02;
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 994 AACCTGCTCATCACAGAGACGGGA 1017
||| ||||||| ||||| |||||

```
Db 1 AACGGCTCATCAGACGCGGA 24

RESULT 218
AAA83176
ID AAA83176 standard; DNA; 19 BP.
XX
XX AAA83176;
XX
XX 04-DEC-2000 (first entry)
DT
XX
XX cdk7 ribozyme binding site #96.
DE
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
OS
XX
XX WO200032765-A2.
PN
XX
XX 08-JUN-2000.
PD
XX
XX 06-DEC-1999; 99WO-US028772.
PF
XX
XX 04-DEC-1998; 98US-0110954P.
PR
XX
XX (IMMU-) IMMUSOL INC.
PA
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
PI
XX
XX WPI; 2000-412314/35.
DR
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 57; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 4.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCCTGGC 1046
DB 1 TGGCAGATTTGGCCTGGC 19

RESULT 219
AAA83176
ID AAA83176 standard; DNA; 19 BP.
XX
XX AAA83176;
XX
XX 04-DEC-2000 (first entry)
DT
XX
XX cdk7 ribozyme binding site #97.
DE
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
OS
XX
XX WO200032765-A2.
PN
XX
```

```
PD 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
PF
XX
XX 04-DEC-1998; 98US-0110954P.
PR
XX
XX (IMMU-) IMMUSOL INC.
PA
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
PI
XX
XX WPI; 2000-412314/35.
DR
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 57; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 4.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1029 GGCTGACTTTGGCCTGGC 1047
DB 1 GGCAGATTTGGCCTGGC 19

RESULT 220
AAA84307
ID AAA84307 standard; DNA; 19 BP.
XX
XX AAA84307;
XX
XX 04-DEC-2000 (first entry)
DT
XX
XX Cyclin D2 ribozyme binding site #4.
DE
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
OS
XX
XX WO200032765-A2.
PN
XX
XX 08-JUN-2000.
PD
XX
XX 06-DEC-1999; 99WO-US028772.
PF
XX
XX 04-DEC-1998; 98US-0110954P.
PR
XX
XX (IMMU-) IMMUSOL INC.
PA
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
PI
XX
XX WPI; 2000-412314/35.
DR
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 75; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
```

CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment
 XX
 SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 4.3e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 993 GAACCTGCTCATCAACGAG 1011

Db 1 GAACCTGCTCATCAACGAG 19

RESULT 221

AAA83174

ID AAA83174 standard; DNA; 19 BP.

XX

AC AAA83174;

XX

DT 04-DEC-2000 (first entry)

XX

DE cdk7 ribozyme binding site #95.

XX

KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX

OS Mammalia.

XX

PN WO200032765-A2.

XX

PD 08-JUN-2000.

XX

PF 06-DEC-1999; 99WO-US028772.

XX

PR 04-DEC-1998; 98US-0110954P.

XX

PA (IMMU-) IMMUSOL INC.

XX

PI Tritz R, Welch PJ, Barber JR, Robbins JM;

XX

DR WPI; 2000-412314/35.

XX

PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
 RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
 PCNA and Cyclin B1.

XX

PS Disclosure; Page 57; 109pp; English.

XX

CC The present invention relates to a hairpin or hammerhead ribozyme,
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment
 XX

SQ Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 4.3e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTTGGCCTGG 1045

Db 1 CTGGCAGATTGGCCTGG 19

RESULT 222

AAH59469

ID AAH59469 standard; DNA; 19 BP.

XX

AC AAH59469;

XX

DT 10-SEP-2001 (first entry)

XX

DE Cyclin D2 ribozyme binding site SEQ ID NO:1893.

XX

KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
 recognition site; target; ribozyme binding site; eye disease; vulvular;
 proliferative disease; skin disease; psoriasis; diabetic retinopathy;
 cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
 matrix metalloproteinase; growth factor; redutase; scarring; cytostatic;
 antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
 antisking; ophthalmological; keratolytic; gene therapy; viral wart;
 atopic dermatitis; actinic keratosis; squamous cell carcinoma;
 basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
 sickle cell retinopathy; ss.

XX

OS Homo sapiens.

XX

OS Synthetic.

XX

PN WO200130362-A2.

XX

PD 03-MAY-2001.

XX

PF 26-OCT-2000; 2000WO-US029500.

XX

PR 26-OCT-1999; 99US-0161532P.

XX

PA (IMMU-) IMMUSOL INC.

XX

PI Robbins JM, Tritz R;

XX

DR WPI; 2001-300427/31.

XX

PT Treating proliferative skin or eye diseases and scarring, using ribozymes
 that cleave RNA encoding cytokines involved in inflammation, matrix
 metalloproteinases, growth factors and cell-cycle dependent kinases.

XX

PS Example 1; Page 209; 408pp; English.

XX

CC The present invention describes a method for treating a proliferative
 skin or eye disease and scarring. The method involves administering a
 ribozyme (I) which cleaves RNA encoding a cytokine involved in
 inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
 dependent kinase, growth factor or a reductase, or administering a
 nucleic acid molecule (II) comprising a promoter operably linked to a
 nucleic acid segment encoding (I). (I) can have antipsoriatic,
 dermatological, cytostatic, antiseborrheic, antidiabetic, antisking,
 ophthalmological, vulvular, keratolytic and virucide activities, and
 cleaves RNA encoding cytokine involved in inflammation. (I) can be used
 in gene therapy. (I) and (II) are useful for treating proliferative skin
 diseases such as psoriasis, atopic dermatitis, actinic keratosis,
 squamous or basal cell carcinoma and viral or seborrheic wart. They can
 also be used for treating proliferative eye diseases such as diabetic
 retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
 prematurity and retinal detachment, and for treating and preventing
 scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
 scar. AAH57577 to AAH62099 represent sequences used in the
 exemplification of the present invention

SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 4.3e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 993 GAACCTGCTCATCAACGAG 1011

Db 1 GAACCTGCTCATCAACGAG 19

```

RESULT 223
AAH58336
ID AAH58336 standard; DNA; 19 BP.
XX AC AAH58336;
XX DT 10-SEP-2001 (first entry)
XX DE Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:760.
XX DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX KW recognition site; target; ribozyme binding site; eye disease; vulnery;
XX KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX KW matrix metalloproteinase; growth factor; reductase; scarring; cytosatic;
XX KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX KW sickle cell retinopathy; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO200130362-A2.
XX PD 03-MAY-2001.
XX PF 26-OCT-2000; 2000WO-US029500.
XX PR 26-OCT-1999; 99US-0161532P.
XX XX (IMMU-) IMMUSOL INC.
XX XX Robbins JM, Tritz R;
XX XX WPI; 2001-300427/31.
XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PS Example 1; Page 127; 408pp; English.
XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX CC ophthalmological, vulnery, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention
XX SQ Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 4.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

RESULT 224
AAH58337
ID AAH58337 standard; DNA; 19 BP.
XX AC AAH58337;
XX DT 10-SEP-2001 (first entry)
XX DE Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:761.
XX DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX KW recognition site; target; ribozyme binding site; eye disease; vulnery;
XX KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX KW matrix metalloproteinase; growth factor; reductase; scarring; cytosatic;
XX KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX KW sickle cell retinopathy; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO200130362-A2.
XX PD 03-MAY-2001.
XX PF 26-OCT-2000; 2000WO-US029500.
XX PR 26-OCT-1999; 99US-0161532P.
XX XX (IMMU-) IMMUSOL INC.
XX XX Robbins JM, Tritz R;
XX XX WPI; 2001-300427/31.
XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PS Example 1; Page 127; 408pp; English.
XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX CC ophthalmological, vulnery, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention
XX SQ Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 4.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 1028 TGGCTGACTTTGGCCTGGC 1046
||||| ||| ||||| |||||
Db 1 TGGCAGATTTGGCCTGGC 19

RESULT 225
AAH58338
ID AAH58338 standard; DNA; 19 BP.
XX
AC AAH58338;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:762.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW anisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 127; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention

Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 19;

Best Local Similarity 89.5%; Pred. No. 4.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1029 GGCTGACTTTGGCCTGGCC 1047
||||| ||| ||||| |||||
Db 1 GGCAGATTTGGCCTGGCC 19

RESULT 226
ADF36757
ID ADF36757 standard; RNA; 19 BP.
XX
AC ADF36757;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human VEGFR2 short interfering nucleic acid (siNA) SEQ ID NO:1046.
XX
KW double-stranded short interfering nucleic acid;
KW short interfering nucleic acid; siNA; downregulation;
KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
KW cyrostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
KW arthritis; psoriasis; endometriosis; angiofibroma;
KW polycystic kidney disease; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070910-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005022.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 29-MAY-2002; 2002WO-US01767A.
PR 06-JUN-2002; 2002US-0386782P.
PR 03-JUL-2002; 2002US-0393796P.
PR 29-JUL-2002; 2002US-0399348P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 04-NOV-2002; 2002US-00287949.
PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Pavco P;
XX
DR WPI; 2003-679876/64.
XX
PT New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
PS Example 3; SEQ ID NO 1046; 207pp; English.
XX
CC The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC gynaecological activities. The siNA are useful for modulating
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,

CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
 CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
 CC drug screening, target identification and validation, genetic
 CC engineering, studying gene function, and also for gene mapping (e.g. of
 CC single-nucleotide polymorphisms). The present sequence is used in the
 CC exemplification of the present invention.

XX
 SQ Sequence 19 BP; 1 A; 5 C; 8 G; 0 T; 5 U; 0 Other;
 Query Match 0.9%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 68.4%; Pred. No. 4.3e+02;
 Matches 13; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGCGCCGAG 1051
 |||::|||:|||||
 Db 1 GACUUGGCUUGGCCCGG 19

RESULT 227
 ADF37081/C
 ID ADF37081 standard; RNA; 19 BP.
 XX
 AC ADF37081;
 DT 12-FEB-2004 (first entry)
 XX
 DE Human VEGFR2 short interfering nucleic acid (siNA) SEQ ID NO:1370.
 XX
 KW double-stranded short interfering nucleic acid;
 KW short interfering nucleic acid; siNA; downregulation;
 KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
 KW cystatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
 KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
 KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
 KW arthritis; psoriasis; endometriosis; angiofibroma;
 KW polycystic kidney disease; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FN WO2003070910-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 20-FEB-2003; 2003WO-US005022.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 29-MAY-2002; 2002WO-US017674.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 03-JUL-2002; 2002US-0393796P.
 PR 29-JUL-2002; 2002US-0399348P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 04-NOV-2002; 2002US-00287949.
 PR 27-NOV-2002; 2002US-00306747.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen J, Beigelman L, Pavco P;
 XX
 PS WPI; 2003-679876/64.
 XX
 PT New double-stranded interfering nucleic acid, useful e.g. for treatment
 PT and diagnosis of cancer, downregulates the vascular endothelial growth
 PT factor receptor gene.
 XX
 PS Example 3; SEQ ID NO 1370; 207pp; English.
 XX
 CC The present invention describes a double-stranded short interfering
 CC nucleic acid (siNA) that downregulates expression of the vascular

CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
 CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
 CC that express siNA; and (5) single-stranded siNA with similar properties.
 CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
 CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
 CC gynaecological activities. The siNA are useful for modulating
 CC (downregulating) the expression of VEGFR genes. The siNA are potentially
 CC useful for treating a wide range of angiogenesis-associated conditions,
 CC particularly cancers, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
 CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
 CC drug screening, target identification and validation, genetic
 CC engineering, studying gene function, and also for gene mapping (e.g. of
 CC single-nucleotide polymorphisms). The present sequence is used in the
 CC exemplification of the present invention.

XX
 SQ Sequence 19 BP; 5 A; 8 C; 5 G; 0 T; 1 U; 0 Other;
 Query Match 0.9%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 4.3e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGCGCCGAG 1051
 |||::|||:|||||
 Db 19 GACTTTGGCTGCGCCGG 1

RESULT 228
 AAA66612
 ID AAA66612 standard; DNA; 20 BP.
 XX
 AC AAA66612;
 XX
 DT 09-OCT-2000 (first entry)
 XX
 DE Dog genomic marker oligonucleotide sequence SEQ ID NO:474.
 XX
 KW Dog; genome; genomic marker; radiation hybrid map; identification;
 KW chromosome location; gene marker; polymorphic microsatellite marker;
 KW phenotype; behaviour; pedigree; ss.
 XX
 OS Canis familiaris.
 XX
 PN WO200029615-A2.
 XX
 PD 25-MAY-2000.
 XX
 PF 15-NOV-1999; 99WO-IB001907.
 XX
 PR 13-NOV-1998; 98US-0108193P.
 XX
 PA (CNRS) CNRS CENT NAT RECH SCI.
 XX
 PI Galibert F, Andre C;
 XX
 PS WPI; 2000-387821/33.
 XX
 PT New radiation hybrid map of the dog, Canine familiaris, genome, useful
 PT for e.g. identifying genes implicated in phenotypic and behavioral traits
 PT or in genetic diseases and for studying dog pedigrees.
 XX
 PS Claim 1; Page 73; 87pp; English.
 XX
 CC The present invention describes a radiation hybrid map of the dog (Canine
 CC familiaris) genome comprising the genome location of a marker selected
 CC from AAA66139 to AAA66942. The radiation hybrid map is useful for
 CC identifying and localising dog genes, since it covers approximately 80 %
 CC of the dog genome and provides a dense map integrating different types
 CC (i.e. Type I and Type II) of markers. The map and the dog genome markers
 CC (or complementary sequences) are especially useful to identify genes
 CC responsible for phenotypic and behavioural traits in dogs, to identify
 CC morbid genes, to analyse diseases and identify implicated genes in such

CC diseases and their alleles, and to study dog pedigrees. They may also be
 CC useful for isolating corresponding human gene sequences e.g. genes
 CC involved in genetic diseases

XX SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 4.5e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1437 GGATGCCATGAAACATCCA 1455
 ||||| ||||| ||||| |||||
 Db 1 GGATTCATGAGACATCCA 19

RESULT 229

AAA66524
 ID AAA66524 standard; DNA; 20 BP.

XX AC AAA66524;

XX DT 09-OCT-2000 (first entry)

XX DE Dog genomic marker oligonucleotide sequence SEQ ID NO:386.

XX KW Dog; genome; genomic marker; radiation hybrid map; identification;
 KW chromosome location; gene marker; polymorphic microsatellite marker;
 KW phenotype; behaviour; pedigree; ss.

XX OS Canis familiaris.

XX PN WO200029615-A2.

XX PD 25-MAY-2000.

XX PF 15-NOV-1999; 99WO-IB001907.

XX PR 13-NOV-1998; 98US-0108193P.

XX PA (CNRS) CNRS CENT NAT RECH SCI.

XX PI Galibert F, Andre C;

XX DR WPI; 2000-387821/33.

XX PT New radiation hybrid map of the dog, Canine familiaris, genome, useful
 PT for e.g. identifying genes implicated in phenotypic and behavioral traits
 PT or in genetic diseases and for studying dog pedigrees.

XX PS Claim 1; Page 69; 87pp; English.

XX CC The present invention describes a radiation hybrid map of the dog (Canine
 CC familiaris) genome comprising the genome location of a marker selected
 CC from AAA66139 to AAA66942. The radiation hybrid map is useful for
 CC identifying and localising dog genes, since it covers approximately 80 %
 CC of the dog genome and provides a dense map integrating different types
 CC (i.e. Type I and Type II) of markers. The map and the dog genome markers
 CC (or complementary sequences) are especially useful to identify genes
 CC responsible for phenotypic and behavioural traits in dogs, to identify
 CC morbid genes, to analyse diseases and identify implicated genes in such
 CC diseases and their alleles, and to study dog pedigrees. They may also be
 CC useful for isolating corresponding human gene sequences e.g. genes
 CC involved in genetic diseases

XX SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 4.5e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1437 GGATGCCATGAAACATCCA 1455
 ||||| ||||| ||||| |||||
 Db 1 GGATTCATGAGACATCCA 19

RESULT 230

AAF72934
 ID AAF72934 standard; DNA; 20 BP.

XX AC AAF72934;

XX DT 24-APR-2001 (first entry)

XX DE Human daxx inhibitory antisense phosphorothioate oligonucleotide SEQ:35.
 XX KW Antisense oligonucleotide; daxx; inhibition; phosphorothioate;
 KW Fas binding protein; CENP-C binding protein; dap6; EAP; cytostatic;
 KW antiinflammatory; death associated protein 6; Ets-1 associated protein;
 KW infection; inflammation; tumour formation; ss.

XX OS Homo sapiens.

XX PN US6180353-B1.

XX PD 30-JAN-2001.

XX PF 24-JAN-2000; 2000US-00490692.

XX PR 24-JAN-2000; 2000US-00490692.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Dean NM, Cowsett LM;

XX DR WPI; 2001-217744/22.

XX PT Novel antisense compounds capable of modulating expression of daxx useful
 PT for diagnosis, prophylaxis and treatment of diseases associated with
 PT expression of daxx.

XX PS Claim 1; Col 42; 59pp; English.

XX CC The present invention describes an antisense compound (I) up to 30
 CC nucleobases in length, where (I) inhibits expression of daxx (also known
 CC as Fas binding protein, CENP-C binding protein, dap6 for death associated
 CC protein 6 and EAP for Ets-1 associated protein). (I) has cytostatic and
 CC antiinflammatory activity, and can be used in antisense therapy and as a
 CC modulator of daxx. (I) is useful for inhibiting the expression of daxx in
 CC cells or tissues in vitro. (I) can be utilised for diagnostics,
 CC therapeutics for the treatment of diseases associated with the expression
 CC of daxx, prophylaxis e.g. to prevent or delay infection, inflammation or
 CC tumour formation and as research reagent. The present sequence represents
 CC an inhibitory human daxx antisense phosphorothioate oligonucleotide which
 CC is used in the exemplification of the present invention

XX SQ Sequence 20 BP; 3 A; 3 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 4.5e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 229 AGTGGTGGTGGCGGCA 247

Db 2 ATTGGAGGTGGTGGCGCA 20
 ||||| ||||| ||||| |||||

RESULT 231

ABQ74636/C
 ID ABQ74636 standard; DNA; 20 BP.

XX AC ABQ74636;

XX DT 24-OCT-2002 (first entry)

XX DE CDC2 gene antisense PCR primer SEQ ID NO:68.

KW Human; PCR primer; identification; tumour senescence; cytotoxic; ss;
KW abnormal cell proliferation; neoplastic cell growth; growth-inhibitory.

OS Homo sapiens.
OS Synthetic.

PN WO200261134-A2.

XX 08-AUG-2002.

XX 21-DEC-2001; 2001WO-US050574.

XX 21-DEC-2000; 2000US-0257907P.

XX 17-DEC-2001; 2001US-00257907.

XX (UNII) UNIV ILLINOIS FOUND.

PI Roninson IB, Chang B;

XX WPI; 2002-619266/66.

XX Identifying a compound that induces senescence in a mammalian p53
PT deficient or tumor cell comprises assaying expression of cellular genes
PT in the presence of the compound with expression of the genes in the
PT absence of the compound.

XX Example 4; Page 50; 73pp; English.

XX The present invention describes a method for identifying a compound that
CC induces senescence in a mammalian cell comprising culturing the cell in
CC the presence and absence of the compound, assaying expression of at least
CC one cellular gene (G1a) from 56 or a gene (G2) from 64 genes, with
CC corresponding accession numbers given in the specification, and
CC identifying compounds that induce senescence when expression of (G1a) or
CC expression of (G2) is lower, in the presence of the compound. Also
CC described: (1) a compound that induces senescence in a mammalian cell;
CC (2) assessing efficacy of a treatment of a disease or condition relating
CC to abnormal cell proliferation or neoplastic cell growth; (3) treating a
CC disease or condition relating to abnormal cell proliferation or
CC neoplastic cell growth; or (4) identifying a compound that inhibits
CC senescence-associated induction of cellular gene expression. The compound
CC is useful for treating or for assessing efficacy of treatment of a
CC disease or condition relating to abnormal cell proliferation or
CC neoplastic cell growth. The compound of the invention has a growth-
CC inhibitory effect without producing systemic side effects found with
CC other growth-inhibitory compounds. ABQ74611 to ABQ74734 represent PCR
CC primers which are used in an example from the present invention
XX

SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1024 AAGCTGGCTGACCTTGGCC 1042

DB 19 AACTGGCTGATTGGCC 1

RESULT 232

ABZ90928/c

ID ABZ90928 standard; DNA; 20 BP.

XX AC ABZ90928;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

XX antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.

PN WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIC-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasegra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

PS Disclosure; SEQ ID NO 6170; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX

SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1018 GAGCTCAAGCTGGCTGACT 1036

DB 20 GAGCTCACCCTGGCTGACT 2

RESULT 233

ABZ98911/c

ID ABZ98911 standard; DNA; 20 BP.

XX AC ABZ98911;

XX 17-OCT-2003 (first entry)

XX Human PDE4A oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

XX antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX Homo sapiens.
OS
XX WO200285308-A2.
FN
XX 31-OCT-2002.
PD
XX
XX 23-APR-2002; 2002WO-US013135.
PF
XX
XX 24-APR-2001; 2001US-0286137P.
PR
XX
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
FI
XX
XX WPI; 2003-229219/22.
DR
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 14153; 872pp; English.
PS
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 535 AGCCCCATCTTTGACAAGC 553
|||||
Db 20 AGCCCCATGTGTGACAAGC 2

RESULT 234
ABZ86780/c
ID ABZ86780 standard; DNA; 20 BP.
XX
AC ABZ86780;
XX
DT 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
DE
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX Homo sapiens.
OS
XX WO200285308-A2.
FN
XX 31-OCT-2002.
PD
XX
XX 23-APR-2002; 2002WO-US013135.
PF
XX
XX 24-APR-2001; 2001US-0286137P.
PR
XX
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
FI
XX
XX WPI; 2003-229219/22.
DR
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Claim 15; SEQ ID NO 2022; 872pp; English.
PS
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 929 AGCTGCTCCGTGGCTGGC 947
|||||
Db 19 AGCTGATCCGAGGCTGGC 1

RESULT 235
ABD31942/c
ID ABD31942 standard; DNA; 20 BP.
XX
AC ABD31942;
XX
DT 29-JUL-2004 (first entry)
XX
XX Human PDB4A-derived oligonucleotide SEQ ID 14153.
DE
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiasthmatic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;

KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 14153; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, respiratory
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 4.5e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 535 AGCCCATCTTTGACCAAGC 553
 |||||
 DB 20 AGCCCATCTGTGACACAGC 2

RESULT 236
 ABD27158/c

ID ABD27158 standard; DNA; 20 BP.
 AC ABD27158;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE AA486518-derived oligonucleotide SEQ ID 6170.
 XX
 DE Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 6170; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e-02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1018 GAGCTCAAGCTGGCTGACT 1036
||||| |||||||
DB 20 GAGCTCACCTGGCTGACT 2

RESULT 237
ABD23010/c
ID ABD23010 standard; DNA; 20 BP.
XX AC ABD23010;
XX AC ABD23010;
XX AC ABD23010;
DT 29-JUL-2004 (first entry)
XX Human myosin X-derived oligonucleotide SEQ ID 2022.
DE Human myosin X-derived oligonucleotide SEQ ID 2022.
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX Homo sapiens.
OS Homo sapiens.
XX WO200285309-A2.
FN WO200285309-A2.
XX 31-OCT-2002.
PD 31-OCT-2002.
XX 23-APR-2002; 2002WO-US013143.
PF 23-APR-2002; 2002WO-US013143.
PR 24-APR-2001; 2001US-0286036P.
XX (EPIG-) EPIGENESIS PHARM INC.
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
FI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.

Pharmaceutical composition for treating asthma, has antisense
oligonucleotide containing less percentage of adenosine, targeted to
nucleic acids associated with lung airway or lung dysfunction, and
bronchodilating agent.

Claim 15; SEQ ID NO 2022; 763pp; English.

This invention describes a novel composition (a) a first active agent,
comprising oligonucleotides, effective for alleviating
bronchoconstriction, respiratory tract inflammation, allergies and
reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
surfactant depletion or hyposecretion, when administered to a mammal. The
oligonucleotides are derived from a gene encoding or regulating
expression of a target polypeptide associated with lung airway or lung
dysfunction or cancer and can be anti-sense to the corresponding mRNA.
The invention also describes a kit, that comprises: (a) a delivery
device, in separate containers, (b) the oligonucleotides, (c)
instructions for adding a carrier and for use of the kit. The composition
of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
beta-adrenergic agonist. The composition is useful for preventing or
treating a respiratory, lung or malignant disease. The administered
composition comprises oligo and is administered to reduce the production
or availability, or to increase the degradation of the target mRNA or to
reduce the amount of target polypeptide present in the lungs. The
pulmonary obstruction, and/or bronchoconstriction and/or lung
inflammation, allergies and/or surfactant hypoproduction are associated

CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX

Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e-02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 929 AGCTGCTCCGTGGCTGGC 947
||||| ||||| |||||||
DB 19 AGCTGATCCGAGGCTGGC 1

RESULT 238
ADJ46542/c
ID ADJ46542 standard; DNA; 20 BP.
XX AC ADJ46542;
XX AC ADJ46542;
XX DT 06-MAY-2004 (first entry)
XX Human requiem antisense oligonucleotide ISIS #152733.
DE Human requiem antisense oligonucleotide ISIS #152733.
XX human; requiem; hyperproliferative disorder; cancer;
KW developmental disorder; infection; inflammation; tumour formation; ss;
KW antisense.
XX Homo sapiens.
OS Homo sapiens.
XX Synthetic.
XX US2004023385-A1.
FN US2004023385-A1.
XX 05-FEB-2004.
PD 05-FEB-2004.
XX 05-AUG-2002; 2002US-00212993.
PF 05-AUG-2002; 2002US-00212993.
XX 05-AUG-2002; 2002US-00212993.
PR (ISIS-) ISIS PHARM INC.
PA (ISIS-) ISIS PHARM INC.
XX Bennett CF, Freier SM, Dobie KW;
PI Bennett CF, Freier SM, Dobie KW;
XX WPI; 2004-142666/14.
DR WPI; 2004-142666/14.
XX New antisense compound targeted to a nucleic acid molecule encoding
PT requiem, useful for modulating expression of requiem or for treating
PT cancer or developmental disorders.
XX Example 15; SEQ ID NO 17; 66pp; English.

The invention relates to a compound targeted to a nucleic acid molecule
encoding requiem which specifically hybridises with the nucleic acid
molecule encoding requiem and inhibits the expression of requiem. The
compound, particularly the antisense oligonucleotide is useful in
modulating the function of nucleic acid molecules encoding requiem. The
antisense compound can also be used as research tools and diagnostics. It
can also be used as tools in differential and/or combinatorial analyses
to elucidate expression patterns of a portion or the entire complement of
genes expressed within cells and tissues. The compound can also be used
for treating diseases or conditions associated with requiem, preferably
hyperproliferative disorder, e.g. cancer or a developmental disorder. The
compound can also be used as prophylaxis, e.g. to prevent or delay
infection, inflammation or tumour formation. The present sequence
represents the human requiem antisense oligonucleotide.


```
XX SQ Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 233 GTGGTGGTGGCGGCACTGA 251
Db 20 GTGATGATGGCGGCACTGA 2

RESULT 239
ADH80344/c
ID ADH80344 standard; DNA; 20 BP.
XX AC ADH80344;
XX DT 06-MAY-2004 (first entry)
XX DE CDC2 PCR primer, SEQ ID 68.
XX KW Cytostatic; human; senescence; tumour; PCR; primer; ss; CDC2.
XX OS Homo sapiens.
XX PN WO2004005462-A2.
XX PD 15-JAN-2004.
XX PF 27-JUN-2003; 2003WO-US020425.
XX PR 03-JUL-2002; 2002US-0394121P.
XX PA (UNII ) UNIV ILLINOIS FOUND.
XX PI Roninson IB, Chang B;
XX DR WPI; 2004-091347/09.
XX PT Identifying compounds that induce senescence in mammalian cells, useful
PT for treating e.g. cancer, comprises assaying the expression of cellular
PT genes in the cell in the presence and absence of the compound.
XX PS Example 4; SEQ ID NO 68; 102pp; English.
XX CC The present invention relates to a method for identifying a compound that
CC induces senescence in a mammalian cell. The method comprises assaying the
CC expression of cellular genes in the cell in the presence and absence of
CC the compound. The method is useful for identifying and modulating
CC expression of tumour senescence genes. These may be used in treating
CC diseases or conditions related to abnormal cell proliferation or
CC neoplastic cell growth, in assessing the efficacy of the treatment of the
CC disease or condition, or in identifying compounds that induce senescence
CC in mammalian cells or that inhibit senescence-associated induction of
CC cellular gene expression. PCR primers ADH80277-ADH80400 were used to
CC amplify genes that are up- or downregulated in doxorubicin-induced
CC accelerated senescence to identify senescence-inducing compounds.
XX SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1024 AAGCTGGCTGACTTTGGCC 1042
Db 19 AAATGGCTGATTTGGCC 1

RESULT 240
ADJ60794/c
ID ADJ60794 standard; DNA; 20 BP.
```

```
XX ADJ60794;
XX AC (first entry)
XX DT 06-MAY-2004 (first entry)
XX DE Oligonucleotide associated to PDE4A #77.
XX KW interleukin; IL-4 receptor; IL-5 receptor; lung disease;
XX airway inflammation; allergy; asthma; impeded respiration;
XX cystic fibrosis; acute respiratory distress syndrome;
XX pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
XX ss.
XX OS Homo sapiens.
XX PN WO2004011613-A2.
XX PD 05-FEB-2004.
XX PF 25-JUL-2003; 2003WO-US023509.
XX PR 29-JUL-2002; 2002US-0399076P.
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX PI Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
XX Shahabuddin S, Lu H, Cong H;
XX DR WPI; 2004-203534/19.
XX PT Novel single or multiple target oligonucleotide anti-sense to e.g.
XX initiation codons and introns of respiratory disease-relevant genes e.g.,
XX CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
XX disease e.g., asthma.
XX PS Claim 2; SEQ ID NO 1650; 85pp; English.
XX CC The present invention relates to an oligonucleotide anti-sense to e.g.,
XX initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
XX end of nucleic acid target comprising gene(s) chosen from e.g.
XX interleukin (IL)-4 receptor, IL-5 receptor or salts of the
XX oligonucleotide and optionally surfactant operatively linked to the
XX oligonucleotide. The method is useful for preventing or treating a
XX respiratory or lung disease, which involves administering to the airways
XX of a subject an effective amount of an inhibitor. The oligonucleotide is
XX useful for production of a medicament for the prevention and/or treatment
XX of a respiratory or lung disease. The respiratory or lung disease is
XX chosen from airway inflammation, allergy(ies), asthma, impeded
XX respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
XX (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
XX (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
XX obstruction. The present sequence represents an oligonucleotide of the
XX invention.
XX SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 535 AGCCCATCTTTGACAAAGC 553
Db 20 AGCCCATCTGTGACAAAGC 2

RESULT 241
ADL16976
ID ADL16976 standard; DNA; 20 BP.
XX AC ADL16976;
XX DT 06-MAY-2004 (first entry)
XX
```


DE Human Ran GTPase activating protein 1 antisense oligo ISIS #177788.
 XX Ran GTPase activating protein 1; hyperproliferative disorder; cancer;
 KW gene therapy; antisense; phosphorothioate backbone; human; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone where all cytidines are
 FT 5-methyl cytidines"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2' -MOE) nucleotides"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2' -MOE) nucleotides"
 XX
 PN US2004022765-A1.
 XX
 XX 05-FEB-2004.
 XX
 XX 31-JUL-2002; 2002US-00211859.
 XX
 XX 31-JUL-2002; 2002US-00211859.
 PR
 XX (ISIS-) ISIS PHARM INC.
 FA
 PI Monia BP, Dobie KW;
 XX
 XX WPI; 2004-142629/14.
 DR
 XX
 XX New compound having a sequence targeted to a nucleic acid encoding Ran
 PT GTPase, useful for preparing a composition for treating
 PT hyperproliferative disorder, e.g., cancer.
 XX
 XX Example 15; SEQ ID NO 35; 45pp; English.
 PS
 XX The present invention is directed to antisense oligonucleotides which are
 CC targeted to a nucleic acid encoding Ran GTPase activating protein 1 and
 CC which modulate the expression of Ran GTPase activating protein 1. The
 CC invention is useful for preparing a composition for treating
 CC hyperproliferative disorder such as cancer. The invention is also useful
 CC in gene therapy. The present sequence is human Ran GTPase activating
 CC protein 1 antisense oligonucleotide.
 XX
 SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. NO. 4.5e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 733 GCACCTGCACCGCATCC 751
 Db 1 GCATCCTGCACCTGCATCC 19
 RESULT 242
 ADM14338/C
 ID ADM14338 standard; DNA; 20 BP.
 XX
 XX AC ADM14338;
 XX
 DT 01-JUL-2004 (first entry)
 XX
 XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:525.
 DE
 XX chimeric; antisense oligonucleotide; phosphorothioate; human;

KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 XX Homo sapiens.
 OS Synthetic.
 OS
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX
 PN WO2004028458-A2.
 XX
 XX 08-APR-2004.
 PD
 XX 25-SEP-2003; 2003WO-US030374.
 PF
 XX 25-SEP-2002; 2002US-0413549P.
 PR
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Gierse JK;
 PI
 XX WPI; 2004-305094/28.
 DR
 XX
 XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX
 PS Claim 4; SEQ ID NO 525; 132pp; English.
 XX
 CC The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. NO. 4.5e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 507 GGGCTACCTGGAGAGCTG 525
|||
Db 20 GGCCTACCTGGGAGAGCTG 2
|||
RESULT 243
ADM14327/C
ID ADM14327 standard; DNA; 20 BP.
XX
AC ADM14327;
XX
XX 01-JUL-2004 (first entry)
DT
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:514.
DE
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WC2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 514; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX CC 9q34.3. The present invention also describes: (1) antisense compounds,
XX CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX CC inhibits its expression; (2) a method of inhibiting the expression of
XX CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric

CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 4 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 507 GGGCTACCTGGAGAGCTG 525
Db 19 GGCCTACCTGGGAGAGCTG 1
|||
RESULT 244
ADO46283/C
ID ADO46283 standard; DNA; 20 BP.
XX
XX ADO46283;
XX
XX 15-JUL-2004 (first entry)
DT
XX Human oligonucleotide #1649.
DE
XX
XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
XX Homo sapiens.
XX
XX US2004049022-A1.
XX
XX 11-MAR-2004.
XX
XX 25-JUL-2003; 2003US-00627930.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX (NYCE/) NYCE J W.
XX (SAND/) SANDRASAGRA A.
XX (TANG/) TANG L.
XX (AGUI/) AGUILAR D.
XX (MILL/) MILLER S.
XX (SHAH/) SHAHABUDDIN S.
XX (LUHH/) LU H.
XX (CONG/) CONG H.
XX
XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
XX Shahabuddin S, Lu H, Cong H;
XX WPI; 2004-293804/27.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
XX PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
XX PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
XX PT asthma.
XX
XX Claim 2; SEQ ID NO 1650; 174pp; English.
XX
XX

CC The invention relates to oligonucleotides anti-sense to an initiation
 CC codon, coding region, 5' or 3' intron-exon junction, intron or region
 CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
 CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)-
 CC -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
 CC tryptase a, tryptase B, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
 CC also relates to a method of screening a candidate compound that binds to
 CC one or more nucleic acid target(s) or expressed product(s), for the
 CC prevention and/or treatment of a respiratory or lung disease. The
 CC oligonucleotides are useful for reducing or inhibiting expression of a
 CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
 CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
 CC tryptase B, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
 CC useful for preventing or treating a respiratory or lung disease. The
 CC respiratory or lung disease is associated with hyper-responsiveness to
 CC and/or increased levels of, adenosine and/or levels of adenosine A
 CC receptor(s), and/or asthma and/or lung allergies associated with
 CC inflammation or an inflammatory disease. The respiratory or lung disease
 CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
 CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
 CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
 CC hypertension, lung inflammation, bronchitis, airway obstruction or
 CC bronchoconstriction. This sequence represents an oligonucleotide of the
 CC invention.

SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 4.5e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 535 AGCCCCATCTTGACAAGC 553
 |||||
 DB 20 AGCCCCATCTTGACAAGC 2

RESULT 245
 ADP18326/c
 ID ADP18326 standard; DNA; 20 BP.
 XX
 AC ADP18326;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE BTG2 gene antisense primer seqid 68.
 XX
 KW cytostatic; senescence; cell proliferation; neoplastic cell growth;
 KW cellular gene expression; reverse transcriptase PCR; RT-PCR; primer; ss;
 KW doxorubicin-induced senescence; HCT 116 cell; human.
 XX
 OS Homo sapiens.
 XX
 PN US2004058320-A1.
 XX
 PD 25-MAR-2004.
 XX
 PF 21-DEC-2001; 2001US-00032264.
 XX
 PR 21-DEC-2000; 2000US-0257907P.
 XX
 PR 17-DEC-2001; 2001US-0341425P.
 XX
 PA (RONI//) RONINSON I B.
 XX (CHAN//) CHANG B.
 XX Roninson IB, Chang B;
 XX WPI; 2004-294237/27.
 XX

PT Identifying a compound that induces senescence in a mammalian cell,
 PT useful for treating abnormal cell proliferation, comprises assaying
 PT expression of a cellular gene in the cell in the presence and in the
 PT absence of a compound.
 XX

PS Example 2; SEQ ID NO 68; 29pp; English.
 XX
 CC The invention describes a method of identifying a compound that induces
 CC senescence in a mammalian cell. The method comprises: culturing the
 CC mammalian cell in the presence and absence of the compound; assaying
 CC expression of at least one cellular gene selected from 73 genes given in
 CC the specification, in the cell in the presence and in the absence of the
 CC compound; and identifying compounds that induce senescence when
 CC expression of at least one of the cellular gene is higher in the presence
 CC of the compound than in the absence of the compound. Also described are:
 CC a compound that induces senescence in a mammalian cell identified from:
 CC the method above; assessing efficacy of a treatment of a disease or
 CC condition relating to abnormal cell proliferation or neoplastic cell
 CC growth; and identifying a compound that inhibits senescence-associated
 CC induction of cellular gene expression. Compounds that induce senescence
 CC in abnormally proliferating or neoplastic cells are useful for treating a
 CC disease or condition relating to abnormal cell proliferation or
 CC neoplastic cell growth. This sequence represents a reverse transcriptase
 CC PCR primer used to identify genes induced and repressed following
 CC doxorubicin-induced senescence of HCT 116 cells.
 XX

SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 4.5e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1024 AAGCTGGCTGACTTTGGCC 1042
 |||||
 DB 19 AAGCTGGCTGACTTTGGCC 1

RESULT 246
 AD056158
 ID AD056158 standard; DNA; 20 BP.
 XX
 AC AD056158;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Cyclin-dependent kinase 6, antisense oligonucleotide #222.
 XX
 KW antisense therapy; cyclin-dependent kinase 6;
 KW hyperproliferative disorder; cancer; bacterial infection;
 KW viral infection; apoptosis; ss; probe; human.
 XX
 OS Homo sapiens.
 XX
 PN US2004087523-A1.
 XX
 PD 06-MAY-2004.
 XX
 PF 31-JUL-2002; 2002US-00210802.
 XX
 PR 31-JUL-2002; 2002US-00210802.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Freier SM, Dobie KW;
 XX WPI; 2004-356241/33.
 XX
 DR New compounds, particularly antisense oligonucleotides targeted to a
 XX nucleic acid encoding cyclin-dependent kinase 6, useful for treating
 PT cancer, bacterial/viral infection or conditions involving aberrant
 PT apoptosis.
 PT

PS Example 15; Page 33; 68pp; English.

XX The invention relates to antisense oligonucleotides targeted to cyclin-
 CC dependent kinase 6, and which inhibit the expression of cyclin-dependent
 CC kinase 6. The antisense oligonucleotides are useful for treating a
 CC disease or condition associated with cyclin-dependent kinase 6, such as a

CC hyperproliferative disorder (e.g. cancer), or conditions arising from
CC bacterial or viral infections, or involving aberrant apoptosis. They are
CC also useful in research and diagnostics for modulating the expression of
CC cyclin-dependent kinase 6. The present sequence represents a cyclin-
CC dependent kinase 6 antisense oligonucleotide. Note: Seqid 15-134 are also
CC used in the sequence listing but these sequences do not match seqid 15-
CC 134 displayed in Tables 1 and 2 (page 30-34).

XX
SQ Sequence 20 BP; 1 A; 9 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1031 CTGACTTTGGCTGGCCCG 1049
Db 1 CTGACTTCGGCCTTGCCCG 19

RESULT 247
ADO56092/c
ID ADO56092 standard; DNA; 20 BP.
XX
AC ADO56092;
XX
DT 29-JUL-2004 (first entry)
XX
DE Cyclin-dependent kinase 6, antisense oligonucleotide #156.
XX
KW antisense therapy; cyclin-dependent kinase 6;
KW hyperproliferative disorder; cancer; bacterial infection;
KW viral infection; apoptosis; ss; probe; human.
XX
OS Homo sapiens.

XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone. All cytidines are 5-
FT methylcytidines."
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN US2004087523-A1.
XX
XX
PD 06-MAY-2004.
XX
XX
PF 31-JUL-2002; 2002US-00210802.
XX
XX
PR 31-JUL-2002; 2002US-00210802.
XX
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX
PI Freier SM, Dobie KW;
XX
XX
DR WPI; 2004-356241/33.
XX
XX
PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding cyclin-dependent kinase 6, useful for treating
PT cancer, bacterial/viral infection or conditions involving aberrant
PT apoptosis.
XX
XX
PS Example 15; Page 31; 68pp; English.

XX
CC The invention relates to antisense oligonucleotides targeted to cyclin-
CC dependent kinase 6, and which inhibit the expression of cyclin-dependent

CC kinase 6. The antisense oligonucleotides are useful for treating a
CC disease or condition associated with cyclin-dependent kinase 6, such as a
CC hyperproliferative disorder (e.g. cancer), or conditions arising from
CC bacterial or viral infections, or involving aberrant apoptosis. They are
CC also useful in research and diagnostics for modulating the expression of
CC cyclin-dependent kinase 6. The present sequence represents a cyclin-
CC dependent kinase 6 antisense oligonucleotide. Note: Seqid 15-134 are also
CC used in the sequence listing but these sequences do not match seqid 15-
CC 134 displayed in Tables 1 and 2 (page 30-34).

XX
SQ Sequence 20 BP; 5 A; 5 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1031 CTGACTTTGGCTGGCCCG 1049
Db 20 CTGACTTCGGCCTTGCCCG 2

RESULT 248
ADP68073
ID ADP68073 standard; DNA; 20 BP.
XX
AC ADP68073;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human jagged 1 target oligonucleotide #4.
XX
KW Jagged 1; serrate gene; JAG 1; HJ1; AGS; AHD; AWS; diagnosis;
KW hyperproliferative disorder; developmental disorder; cytostatic; therapy;
KW human; ss.
XX
XX
OS Homo sapiens.
XX
PN US2004102401-A1.
XX
XX
PD 27-MAY-2004.
XX
PF 22-NOV-2002; 2002US-00304082.
XX
XX
PR 22-NOV-2002; 2002US-00304082.
XX
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX
PI Dean NM, Bennett CF, Dobie KW;
XX
XX
DR WPI; 2004-399731/37.
XX
XX
PT New compound targeted to a nucleic acid molecule encoding jagged 1,
PT useful in diagnosing and treating hyperproliferative disorder.
XX
XX
PS Example 15; SEQ ID NO 51; 40pp; English.

XX
XX
CC The present invention is directed to antisense oligonucleotides targeted
CC to jagged 1 (also known as serrate gene, JAG1, HJ1, AGS, AHD and AWS) and
CC which modulate the expression of jagged 1. The invention is useful in
CC diagnosing and treating hyperproliferative and developmental disorders.
CC The invention acts as a cytostatic agent. The present sequence is human
CC jagged 1 target oligonucleotide. This sequence is used in the
CC exemplification of the invention.

XX
XX
SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 4.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 877 GATGACTTGGGAACATCA 895
Db 1 GATACTTGGGAACATCA 19

AAAF97316	
ID	AAF97316 standard; DNA; 21 BP.
XX	
AC	AAF97316;
XX	
DT	06-JUN-2001 (first entry)
XX	
DE	Human gene single nucleotide polymorphism #2077.
XX	
KW	Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW	polymorphism; vascular disease; coronary artery disease; forensics;
KW	myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW	pulmonary embolism; paternity test; ds.
XX	
OS	Homo sapiens.
XX	
PH	Key Location/Qualifiers
FT	Variation replace(11,T)
FT	/tag= a
FT	/standard_name= "single nucleotide polymorphism"
XX	
PV	WO200118250-A2.
XX	
PD	15-MAR-2001.
XX	
PF	07-SEP-2000; 2000WO-US024503.
XX	
PR	10-SEP-1999; 99US-0153357P.
PR	26-JUL-2000; 2000US-0220947P.
PR	16-AUG-2000; 2000US-0225724P.
XX	
PA	(WHED) WHITEHEAD INST BIOMEDICAL RES.
PA	(MILL-) MILLENNIUM PHARM INC.
XX	
PI	Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;
XX	
DR	WPI; 2001-226749/23.
XX	
PT	Nucleic acids comprising single nucleotide polymorphisms, useful in
PT	applications such as forensics, paternity testing, medicine, genetic
PT	analysis and phenotype correlations to diseases such as diabetes and
PT	atherosclerosis.
XX	
PS	Example; Page 189; 242pp; English.
XX	
CC	The present invention provides a method of diagnosing a vascular disease
CC	in an individual, involving determining the sequence at various
CC	polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC	genes. The sequences at a number of polymorphic sites are also provided
CC	in the specification. In particular, the method can be used in the
CC	diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC	disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC	pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC	useful in forensics, paternity testing, genetic analysis and phenotype
CC	correlations to diseases. The present sequence is an example of one of
CC	the human gene SNPs shown in the specification
XX	
SQ	Sequence 21 BP; 2 A; 5 C; 8 G; 6 T; 0 U; 0 Other;
	Query Match 0.9%; Score 15.8; DB 1; Length 21;
	Best Local Similarity 89.5%; Pred. No. 4.7e+02;
	Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	1027 CTGGCTGACTTTGGCGTCGG 1045
DB	3 CTCGTGACTTTGGCGTCGG 21
	RESULT 251
	AAH62396
ID	AAH62396 standard; DNA; 21 BP.
XX	
AC	AAH62396;
XX	

RESULT 249	
ADP68037/c	
ID	ADP68037 standard; DNA; 20 BP.
XX	
AC	ADP68037;
XX	
DT	12-AUG-2004 (first entry)
XX	
DE	Human jagged 1 antisense oligonucleotide ISIS #171247.
XX	
KW	Jagged 1; serrate gene; JAG 1; HJ1; AGS; AHD; AWS; diagnosis;
KW	hyperproliferative disorder; developmental disorder; cytostatic; therapy;
KW	human; antisense; phosphorothioate backbone; ss.
XX	
OS	Homo sapiens.
OS	Synthetic.
XX	
PH	Key Location/Qualifiers
FT	modified_base 1..20
FT	/tag= b
FT	/mod_base= OTHER
FT	/note= "Phosphorothioate backbone where all cytidines are
FT	5-methyl cytidines"
FT	
FT	modified_base 1..5
FT	/tag= a
FT	/mod_base= OTHER
FT	/note= "2' -methoxyethyl (2' -MOE) nucleotides"
FT	
FT	modified_base 16..20
FT	/tag= c
FT	/mod_base= OTHER
FT	/note= "2' -methoxyethyl (2' -MOE) nucleotides"
XX	
US	US2004102401-A1.
PN	
PD	27-MAY-2004.
XX	
XX	
PF	22-NOV-2002; 2002US-00304082.
XX	
PR	22-NOV-2002; 2002US-00304082.
XX	
PA	(ISIS-) ISIS PHARM INC.
XX	
PI	Dean NM, Bennett CF, Dobie KW;
XX	
DR	WPI; 2004-399731/37.
XX	
PT	New compound targeted to a nucleic acid molecule encoding jagged 1,
PT	useful in diagnosing and treating hyperproliferative disorder.
XX	
PS	Example 15; SEQ ID NO 15; 40pp; English.
XX	
CC	The present invention is directed to antisense oligonucleotides targeted
CC	to jagged 1 (also known as serrate gene, JAG1, HJ1, AGS, AHD and AWS) and
CC	which modulate the expression of jagged 1. The invention is useful in
CC	diagnosing and treating hyperproliferative and developmental disorders.
CC	The invention acts as a cytostatic agent. The present sequence is human
CC	jagged 1 antisense oligonucleotide. This sequence is used in the
CC	exemplification of the invention.
XX	
SQ	Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
	Query Match 0.9%; Score 15.8; DB 1; Length 20;
	Best Local Similarity 89.5%; Pred. No. 4.5e+02;
	Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	877 GATGACTGTGGGAACATCA 895
DB	20 GATACTGTGGGAACATCA 2
	RESULT 250

XX 09-SEP-2004 (revised)
 DT 12-SEP-2001 (first entry)
 XX NFE2L1 polymorphism containing DNA fragment #297.
 DE Single nucleotide polymorphism; SNP; human; cancer; inflammation;
 XX heart disease; paternity testing; forensic science; ds.
 OS Homo sapiens.
 OS Unidentified.
 FH Key Location/Qualifiers
 FT variation 11
 FT /*tag= a
 FT /standard_name= "single nucleotide polymorphism"
 XX WO200138576-A2.
 XX 31-MAY-2001.
 XX 17-NOV-2000; 2000WO-US031639.
 XX 24-NOV-1999; 99US-0167334P.
 XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA Cargill M, Ireland JS, Lander ES;
 PI WPI; 2001-367705/38.
 DR New nucleic acid segments of the human genome, particularly from genes
 XX including polymorphic sites, for phenotype correlation, forensics,
 PT paternity testing, medicine and genetic analysis.
 XX Claim 1; Page 53; 80pp; English.
 CC DNA sequences AAH62100 - AAH62688 represent segments of human genes which
 CC contain single nucleotide polymorphisms (SNPs). A method is included in
 CC the invention for analysing a nucleic acid sample, which consists of
 CC determining the base occupying any one of the polymorphic sites given in
 CC the SNP containing sequences. The nucleotide sequences can be used in the
 CC diagnosis or monitoring of diseases, such as cancer, inflammation, heart
 CC diseases, diseases of the cardiovascular system, and infection by
 CC microorganisms. The oligonucleotides are also useful in the manufacture
 CC of a medicament for the treatment or prophylaxis of the diseases, and as
 CC a pharmaceutical. SNP containing oligonucleotides are useful in
 CC applications such as phenotype correlation, forensics, paternity testing,
 CC medicine and genetic analysis
 CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
 XX Sequence 21 BP; 5 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.9%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 89.5%; Pred. No. 4.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 43 GGAGGACCTGACGTGAC 61
 ||||| ||||| ||||| |||||
 Db 2 GGAGGACCTGACGTGAC 20
 RESULT 252
 ABX72455/c
 ID ABX72455 standard; DNA; 22 BP.
 XX AC ABX72455;
 XX 03-JUN-2003 (first entry)
 DT Human NOVX DNA PCR primer #120.
 XX DE XX

KW Human; NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;
 KW hypertension; congenital heart defect; aortic stenosis; valve disease;
 KW atrial septal defect; atrioventricular canal defect; ductus arteriosus;
 KW pulmonary stenosis; subaortic stenosis; ventricular septal defect; VSD;
 KW tuberosus sclerosis; scleroderma; atherosclerosis; infectious disease;
 KW obesity; anorexia; neurodegenerative disorder; Alzheimer's disease;
 KW Parkinson's disease; immune disorder; haematopoietic disorder; primer;
 KW haemophilia; hypercoagulation; Crohn's disease; cancer.
 XX Homo sapiens.
 OS WO200281498-A2.
 PN 17-OCT-2002.
 PD 03-APR-2002; 2002WO-US010780.
 PF 03-APR-2001; 2001US-0281086P.
 XX 03-APR-2001; 2001US-0281136P.
 PR 05-APR-2001; 2001US-0281863P.
 PR 05-APR-2001; 2001US-0281906P.
 PR 06-APR-2001; 2001US-0282020P.
 PR 10-APR-2001; 2001US-0282930P.
 PR 10-APR-2001; 2001US-0282934P.
 PR 12-APR-2001; 2001US-0283512P.
 PR 13-APR-2001; 2001US-0283710P.
 PR 17-APR-2001; 2001US-0284234P.
 PR 19-APR-2001; 2001US-0285325P.
 PR 20-APR-2001; 2001US-0285381P.
 PR 20-APR-2001; 2001US-0285609P.
 PR 23-APR-2001; 2001US-0285748P.
 PR 23-APR-2001; 2001US-0285890P.
 PR 24-APR-2001; 2001US-0286068P.
 PR 25-APR-2001; 2001US-0286292P.
 PR 27-APR-2001; 2001US-0287213P.
 PR 02-MAY-2001; 2001US-0288257P.
 PR 29-MAY-2001; 2001US-0294164P.
 PR 30-MAY-2001; 2001US-0294484P.
 PR 18-JUN-2001; 2001US-0298952P.
 PR 19-JUN-2001; 2001US-0299237P.
 PR 19-JUN-2001; 2001US-0299276P.
 PR 12-SEP-2001; 2001US-0318750P.
 PR 25-SEP-2001; 2001US-0324800P.
 PR 25-SEP-2001; 2001US-0324802P.
 PR 27-SEP-2001; 2001US-0325684P.
 PR 17-OCT-2001; 2001US-0330143P.
 PR 14-NOV-2001; 2001US-0332131P.
 PR 14-NOV-2001; 2001US-0332240P.
 PR 14-NOV-2001; 2001US-0332779P.
 PR 21-NOV-2001; 2001US-0332115P.
 PR 04-DEC-2001; 2001US-0337621P.
 PR 03-JAN-2002; 2002US-0345783P.
 PR 16-JAN-2002; 2002US-0350251P.
 PR 02-APR-2002; 2002US-00114270.
 (CURA-) CURAGEN CORP.
 GUO X, Kekuda R, Miller CE, Malyankar UM, Spytek KA;
 PI Pattarajan M, Liu X, Gusev VI, Li L, Vernet CAM, Zerhusen BD;
 PI Gorman I, Shenoy SG, Pena CE, Smithson G, Burgess CE, Gerlach V;
 PI Padigaru M, Shinkets RA, Gangolli EA, Taupier RJ, Casman SJ, Ji W;
 PI Anderson DW, Leite MW, Rastelli L, Edinger SR, Stone DJ;
 PI Macdougall JR, Rothenberg ME, Mazur A, Millet I, Payman JA;
 PI Ellerman K;
 XX WPI; 2003-046858/04.
 DR New isolated NOVX polypeptide useful for treating atherosclerosis,
 PT metabolic disorders, diabetes, obesity, infectious disease, anorexia,
 PT neurodegenerative disorders, Alzheimer's disease and cancer.
 XX Example 83; Page 545; 666pp; English.

CC The invention relates to human polypeptides, termed NOVX, and the
 CC polynucleotides encoding them. The polypeptides and polynucleotides are
 CC useful for diagnosing disease, and screening for potential therapeutic
 CC agents. The sequences are useful for treating metabolic disorders, aortic
 CC cardiomyopathy, diabetes, hypertension, congenital heart defects, aortic
 CC stenosis, atrial septal defect (ASD), atrioventricular canal defect,
 CC ductus arteriosus, pulmonary stenosis, subaortic stenosis, ventricular
 CC septal defect (VSD), valve diseases, tuberosus sclerosis, scleroderma,
 CC atherosclerosis, obesity, infectious disease, anorexia, neurodegenerative
 CC disorders, Alzheimer's disease, Parkinson's disease, immune disorders,
 CC haematopoietic disorders, haemophilia, hypercoagulation, Crohn's disease
 CC and cancer. This sequence represents a PCR primer used to amplify a human
 CC NOVX polynucleotide of the invention

XX
 SQ Sequence 22 BP; 4 A; 8 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 22;
 Best Local Similarity 89.5%; Pred. No. 4.9e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 846 GTACCTGGACAGGACCTG 864
 |||||
 Db 20 GTACCTGGAGAGTACCTG 2

RESULT 253
 AAH47509
 ID AAH47509 standard; DNA; 23 BP.

AC AAH47509;

XX 30-NOV-2001 (first entry)

XX Forward primer used in the construction of plasmid pSM847.

XX Cloning vector; pSM843; rep gene; ORF81; trbA; parA; cad operon;
 KW antibiotic resistance; caduim; SoxA; SoxB; SoxC; sox enzyme;
 KW Rhodococcus; sulfur; fossil fuel; promoter; PCR primer; ss.

XX Synthetic.

XX EP1127943-A2.

XX 29-AUG-2001.

XX 19-FEB-2001; 2001EP-00200582.

XX 24-FEB-2000; 2000IT-MI000332.

XX (ENIE) ENITECNOLOGIE SPA.

XX Margarit Y Rosi, Serbolisca LP, De Ferra F, Rodriguez F;

XX WPI; 2001-551402/62.

XX Plasmid vector of Rhodococcus for producing proteins such as enzymes
 PT involved in the removal of organic sulfur from fossil fuels, comprises a
 PT parA gene, genes encoding proteins involved in replication, and a genetic
 PT marker.

XX Example 7; Page 8; 24pp; English.

XX The invention provides a cloning vector pSM843, comprising the rep genes
 CC ORF81 and trbA (encoding proteins involved in replication in
 CC Rhodococcus), the gene parA, and at least one gene which encodes a
 CC genetic marker (selected from the cad operon) that confers resistance to
 CC caduim or an antibiotic. The rep genes are useful for producing
 CC homologous or heterologous proteins of interest such as enzymes involved
 CC in the selective removal of organic sulfur from fossil fuels (SoxA, SoxB,
 CC SoxC), L-amino acids, enantiomorphs of chiral compounds and carboxylic
 CC acids in a microorganism. The proteins are preferably sox enzymes.
 CC Microorganisms such as Rhodococcus, Gordonia and Nocardia containing the
 CC sox operon downstream to the constitutive promoter, in particular

CC Rhodococcus strain SMV114 CBS 102447, transformed with the vector are
 CC useful for removing organic sulfur from fossil fuels. The expression
 CC vector has high stability in the absence of selective pressure in the
 CC transformed strains of Rhodococcus. The present sequence represents a PCR
 CC primer used in the construction of the vector pSM847

XX Sequence 23 BP; 7 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 23;
 Best Local Similarity 89.5%; Pred. No. 5.1e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 414 GAGAGTGGCTATGCGCAAC 432
 |||||
 Db 5 GAGAGTGCATATGCGGAC 23

RESULT 254
 ADG29464

ID ADG29464 standard; RNA; 23 BP.

XX ADG29464;

XX 26-FEB-2004 (first entry)

XX CDK2 siRNA-target RNA - SEQ ID 30.

XX double-stranded short interfering nucleic acid; siNA;
 KW antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian;
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
 KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
 KW amyotrophic lateral sclerosis; gene therapy; target; ss; CDK2.

XX Unidentified.

XX WO2003074654-A2.

XX 12-SEP-2003.

XX 20-FEB-2003; 2003WO-US005028.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;

XX Jamison S, Usman N, Thompson J;

XX WPI; 2003-731676/69.

XX New double-stranded short interfering nucleic acid molecule, useful for
 PT down-regulating the expression of an endogenous mammalian target gene or
 PT for treating diseases that respond to modulation of gene expression or
 PT activity.

XX Example 24; SEQ ID NO 30; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid
 CC (siNA) molecule that down-regulates expression of an endogenous mammalian
 CC target gene comprising one or more chemical modifications and each strand
 CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
 CC the invention demonstrates antiarteriosclerotic, neuroprotective,
 CC nootropic, antiparkinsonian and anticonvulsant activities and may be
 CC useful for down-regulating the expression of an endogenous mammalian
 CC target gene and therefore in the treatment of any disease or condition
 CC that responds to modulation of gene expression or activity in a cell,
 CC tissue or organism. The disease or condition may include pulmonary

CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
CC Parkinson's disease, epilepsy, dementia, Huntington's disease or
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
CC gene therapy applications. The current sequence is that of the siNA
CC target DNA of the invention.
XX
SQ Sequence 23 BP; 7 A; 6 C; 5 G; 0 T; 5 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 23;
Best Local Similarity 63.2%; Pred. No. 5.1e+02;
Matches 12; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 1022 TCAAGCTGGCTGACTTTGG 1040
:||||:||||:||||:||||:
Db 4 UCAGCUAGCAGACUUUGG 22

RESULT 255
ABV74691/c
ID ABV74691 standard; DNA; 24 BP.
XX
AC ABV74691;
XX
DT 03-FEB-2003 (first entry)
XX
DE Human ribosomal protein S4-18.04 PCR primer #1.
XX
KW Human; ribosomal protein S4-18.04; tumour; haemopathy; HIV infection;
KW immunological disease; inflammation; cytostatic; anti-HIV; PCR; primer;
KW ss.
XX
OS Homo sapiens.
XX
PN CN1345823-A.
XX
PD 24-APR-2002.
XX
PF 29-SEP-2000; 2000CN-00125506.
XX
PR 29-SEP-2000; 2000CN-00125506.
XX
PA (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.
XX
PI Mao Y, Xie Y;
XX
XX WPI; 2002-584314/63.
XX
XX Novel polypeptide-human ribosomal protein S4-18.04 and polynucleotide for
XX encoding said polypeptide.
XX
PS Example 2; Page 17 (Disclosure); 33pp; Chinese.
XX
CC The present invention relates to human ribosomal protein S4-18.04 (see
CC AB98784). The protein and its coding sequence can be used for treating
CC several diseases, such as malignant tumours, haemopathy, HIV infection,
CC immunological disease and various inflammations. The present sequence is
CC a PCR primer, which was used in an example from the invention
XX
SQ Sequence 24 BP; 8 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 24;
Best Local Similarity 89.5%; Pred. No. 5.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 540 CATCTTTGACAGCCCTC 558
|||||
Db 22 CATCTTTGAGAGCACCTC 4

RESULT 256
ABL55122
ID ABL55122 standard; DNA; 24 BP.
XX

AC ABL55122;
XX
DT 31-MAY-2002 (first entry)
XX
DE Human Myb protein 32 RT-PCR primer, SEQ ID NO:3.
XX
KW Human; Myb protein 32; recombinant production; cancer; HIV infection;
KW human immunodeficiency virus; gene therapy; cytostatic; anti-HIV;
KW reverse transcription-PCR; RT-PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN CN1325886-A.
XX
PD 12-DEC-2001.
XX
PF 26-MAY-2000; 2000CN-00115890.
XX
PR 26-MAY-2000; 2000CN-00115890.
XX
PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI Mao Y, Xie Y;
XX
DR WPI; 2002-196654/26.
XX
XX Polypeptide-human Myb protein 32 and polynucleotide for coding it, useful
XX for treating cancer, and HIV infection.
XX
PS Example 2; Page 17 (Disclosure); 33pp; Chinese.
XX
CC The invention relates to human Myb protein 32 (AAM49156) and to nucleic
CC acids encoding it (ABL55121). The protein has a molecular weight of 32
CC kD. The invention also relates to a method for the recombinant production
CC of the protein, an antagonist of the protein, and the use of the protein,
CC gene and antagonist in therapeutic applications. Myb protein 32 can be
CC used in the treatment of a variety of diseases such as cancer and HIV
CC (human immunodeficiency virus) infection. Sequences ABL55122-ABL55123
CC represent reverse transcription-PCR (RT-PCR) primers used in an
CC exemplification of the invention to isolate human Myb protein 32 cDNA
XX
SQ Sequence 24 BP; 2 A; 12 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 24;
Best Local Similarity 89.5%; Pred. No. 5.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 558 CAGCCGCCGCTCGTCGT 576
|||||
Db 5 CAGCCGCCGCGCGCGCT 23

RESULT 257
AAZ56474
ID AAZ56474 standard; DNA; 22 BP.
XX
AC AAZ56474;
XX
DT 21-MAR-2000 (first entry)
XX
DE Vascular endothelial growth factor receptor KDR RT-PCR primer #5.
XX
KW Vascular endothelial growth factor receptor; KDR; VEGFR1; VEGFR;
KW haematopoietic stem cell population; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO9961584-A1.
XX
PD 02-DEC-1999.
XX
PF 28-MAY-1999; 99WO-US012054.
XX

PR 29-MAY-1998; 98US-0087153P.
 XX (UYJE-) UNIV JEFFERSON THOMAS.
 PA (SUPE-) INST SUPERIORE DI SANITA.
 PA (ZIEG/) ZIEGLER B L.
 XX Ziegler BL, Feschle C;
 PI WPI; 2000-086715/07.
 XX Preparation of a cell population.
 PT Example; Page 45; 83pp; English.
 XX The present invention describes a method for preparing a cell population
 CC enriched for long-term repopulating human haematopoietic stem cells. The
 CC method comprises obtaining a population of cells from human
 CC haematopoietic tissue and isolating a population of KDR+ cells. KDR is a
 CC human vascular endothelial growth factor receptor (VEGFR1). The novel
 CC cell population can be used to inhibit rejection of a transplanted organ,
 CC by administering the KDR+ cells of the donor to a tissue recipient. The
 CC present sequence represents a reverse transcription PCR primer, which is
 CC used in an example from the present invention
 XX Sequence 22 BP; 8 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.9%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 5.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 47 GACACGAGTGTGACTGCTGAA 68
 DB 1 GACACGAGTGTGACCACTGAA 22
 RESULT 258
 ABS59078
 ID ABS59078 standard; DNA; 22 BP.
 XX ABS59078;
 AC ABS59078;
 XX 05-NOV-2002 (first entry)
 DT Human G-protein coupled receptor, forward primer #76.
 DE Human; G-protein coupled receptor; GPCR; cardiomyopathy; atherosclerosis;
 XX diabetes; cell signal processing; metabolic pathway modulation; cancer;
 KW adenocarcinoma; lymphoma; prostate cancer; uterus cancer; asthma;
 KW immune response; neurodegenerative disorder; inflammatory disorder;
 KW Crohn's disease; multiple sclerosis; Albright hereditary osteodystrophy;
 KW primer; PCR; ss.
 OS Homo sapiens.
 XX WO200259313-A2.
 EN 01-AUG-2002.
 PD 18-DEC-2001; 2001WO-US049394.
 PF 18-DEC-2000; 2000US-0256635P.
 XX 21-DEC-2000; 2000US-0257876P.
 PR 04-JAN-2001; 2001US-0259743P.
 PR 10-JAN-2001; 2001US-0260718P.
 PR 12-JAN-2001; 2001US-0261498P.
 PR 24-JAN-2001; 2001US-0263689P.
 PR 08-FEB-2001; 2001US-0271021P.
 PR 22-FEB-2001; 2001US-0271594P.
 PR 14-MAR-2001; 2001US-0278150P.
 PR 23-MAR-2001; 2001US-0278150P.
 PR 18-APR-2001; 2001US-0284591P.
 PR 23-APR-2001; 2001US-0285718P.
 PR 19-JUN-2001; 2001US-0299327P.

PR 16-AUG-2001; 2001US-0312902P.
 XX (CURA-) CURAGEN CORP.
 XX Li L, Ballinger RA, Padigar M, Kekuda R, Colman SD, Spytek KA;
 PI Casman SJ, Vernet CAM, Shenoy SG, Gusev V, Malyankar UM, Edinger S;
 PI Gerlach V, Smithson G, Stone DJ, Sciore P, Macdougall JR, Gunther E;
 PI Peyman JA, Ellerman K, Gangolli EA, Millet I;
 XX WPI; 2002-599789/64.
 XX New G protein coupled receptor polypeptides and polynucleotides, useful
 PT in gene therapy, particularly for treating or preventing cardiomyopathy,
 PT atherosclerosis, diabetes, multiple sclerosis, Crohn's disease or cancer
 PT in humans.
 XX Claim 9; Page 467; 685pp; English.
 XX The invention relates to novel isolated G-protein coupled receptor (GPCR)
 CC polypeptides and polynucleotides. The GPCR polypeptide, GPCR nucleic acid
 CC and antibody are useful for treating, preventing or alleviating a GPCR-
 CC associated disorder or a pathological state in a subject, particularly a
 CC human. In particular, the disorder is cardiomyopathy, atherosclerosis,
 CC diabetes, or a disorder related to cell signal processing and metabolic
 CC pathway modulation. The GPCR polypeptide and nucleic acid are also useful
 CC for diagnosing the presence of or predisposition to a disease associated
 CC with altered levels of GPCR, particularly cancer. The GPCR nucleic acid
 CC and polypeptide are especially useful in therapeutic or prophylactic
 CC applications for disorders associated with aberrant GPCR expression or
 CC activity. The DNA encoding the protein is useful in gene therapy for
 CC treating the above conditions. Furthermore, the nucleic acids and
 CC polypeptides are useful in treating adenocarcinoma, lymphoma, prostate
 CC cancer, uterus cancer, immune response, neurodegenerative disorders,
 CC asthma, inflammatory disorders, Crohn's disease, multiple sclerosis or
 CC Albritght hereditary osteodystrophy. These are also useful in developing a
 CC powerful assay system for functional analysis of various human disorders,
 CC as well as in diagnostic applications. ABS58747-ABS59231 represent human
 CC GPCR coding sequences, primers and probes of the invention
 XX Sequence 22 BP; 3 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
 SQ Query Match 0.9%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 5.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 820 GAGAAAGTCCCTCACCCCTTGCT 841
 DB 1 GGGAAAGTCCCTTACCCCTTTCT 22
 RESULT 259
 AAQ37360
 ID AAQ37360 standard; DNA; 23 BP.
 XX AAQ37360;
 AC AAQ37360;
 XX 25-MAR-2003 (revised)
 DT 20-JUN-1993 (first entry)
 XX Probe for Streptococcus agalactiae 16S rRNA gene fragments.
 DE Bacterium; cerebrospinal fluid; CSF; 16S rRNA; meningitis; ss.
 XX Synthetic.
 OS WO9303186-A1.
 PN 18-FEB-1993.
 PD 31-JUL-1992; 92WO-US006365.
 XX 31-JUL-1991; 91US-00738393.
 PR 31-JUL-1991; 91US-00738393.

```
PA (HOFF ) HOFFMANN LA ROCHE INC.
XX
PI Greisen KS, Leong DU;
XX WPI; 1993-076541/09.
DR
XX
PT Detecting bacteria causing meningitis in cerebrospinal fluid - by
PT amplifying target regions and detecting using panel of probes which
PT includes universal bacterial probe.
XX
PS Example 5; Page 29; 65pp; English.
XX
XX A series of synthetic probes were tested for their ability to hybridise
CC to specific bacterial species in the CSF. For the detection of
CC Streptococcus agalactiae probe VPI09 lacking 2 bases from the 5' end
CC gives an improved detection rate. See also AAQ37314-59. (Updated on 25-
CC MAR-2003 to correct PN field.)
XX
SQ Sequence 23 BP; 8 A; 2 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 23;
Best Local Similarity 81.8%; Pred. No. 5.5e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 585 ATCTGAGATTGGCTTTGGGAAA 606
DB 1 AACTGAGATTGGCTTTAAGAGA 22

RESULT 260
AAQ37359/C
ID AAQ37359 standard; DNA; 23 BP.
XX
AC AAQ37359;
XX
DT 25-MAR-2003 (revised)
DT 20-JUN-1993 (first entry)
XX
XX Probe for Streptococcus agalactiae 16S rRNA gene fragments.
DE
XX Bacterium; cerebrospinal fluid; CSF; 16S rRNA; meningitis; ss.
XX
XX Synthetic.
XX
XX WO9303186-A1.
XX
XX 18-FEB-1993.
XX
XX 31-JUL-1992; 92WO-US006365.
XX
XX 31-JUL-1991; 91US-00738393.
XX
XX (HOFF ) HOFFMANN LA ROCHE INC.
XX
XX Greisen KS, Leong DU;
XX
XX WPI; 1993-076541/09.
XX
XX Detecting bacteria causing meningitis in cerebrospinal fluid - by
XX amplifying target regions and detecting using panel of probes which
XX includes universal bacterial probe.
XX
XX Example 5; Page 29; 65pp; English.
XX
XX A series of synthetic probes were tested for their ability to hybridise
CC to specific bacterial species in the CSF. For the detection of
CC Streptococcus agalactiae probe KG00001 lacking 2 bases from the 5' end
CC gives an improved detection rate. See also AAQ37314-60. (Updated on 25-
CC MAR-2003 to correct PN field.)
XX
SQ Sequence 23 BP; 7 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 23;
Best Local Similarity 81.8%; Pred. No. 5.5e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

PA (HOFF ) HOFFMANN LA ROCHE INC.
XX
PI Greisen KS, Leong DU;
XX WPI; 1993-076541/09.
DR
XX
PT Detecting bacteria causing meningitis in cerebrospinal fluid - by
PT amplifying target regions and detecting using panel of probes which
PT includes universal bacterial probe.
XX
PS Example 5; Page 29; 65pp; English.
XX
XX A series of synthetic probes were tested for their ability to hybridise
CC to specific bacterial species in the CSF. For the detection of
CC Streptococcus agalactiae probe VPI09 lacking 2 bases from the 5' end
CC gives an improved detection rate. See also AAQ37314-59. (Updated on 25-
CC MAR-2003 to correct PN field.)
XX
SQ Sequence 23 BP; 8 A; 2 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 23;
Best Local Similarity 81.8%; Pred. No. 5.5e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 585 ATCTGAGATTGGCTTTGGGAAA 606
DB 1 AACTGAGATTGGCTTTAAGAGA 22

RESULT 260
AAQ37359/C
ID AAQ37359 standard; DNA; 23 BP.
XX
AC AAQ37359;
XX
DT 25-MAR-2003 (revised)
DT 20-JUN-1993 (first entry)
XX
XX Probe for Streptococcus agalactiae 16S rRNA gene fragments.
DE
XX Bacterium; cerebrospinal fluid; CSF; 16S rRNA; meningitis; ss.
XX
XX Synthetic.
XX
XX WO9303186-A1.
XX
XX 18-FEB-1993.
XX
XX 31-JUL-1992; 92WO-US006365.
XX
XX 31-JUL-1991; 91US-00738393.
XX
XX (HOFF ) HOFFMANN LA ROCHE INC.
XX
XX Greisen KS, Leong DU;
XX
XX WPI; 1993-076541/09.
XX
XX Detecting bacteria causing meningitis in cerebrospinal fluid - by
XX amplifying target regions and detecting using panel of probes which
XX includes universal bacterial probe.
XX
XX Example 5; Page 29; 65pp; English.
XX
XX A series of synthetic probes were tested for their ability to hybridise
CC to specific bacterial species in the CSF. For the detection of
CC Streptococcus agalactiae probe KG00001 lacking 2 bases from the 5' end
CC gives an improved detection rate. See also AAQ37314-60. (Updated on 25-
CC MAR-2003 to correct PN field.)
XX
SQ Sequence 23 BP; 7 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 23;
Best Local Similarity 81.8%; Pred. No. 5.5e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Best Local Similarity 81.8%; Pred. No. 5.5e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 585 ATCTGAGATTGGCTTTGGGAAA 606
DB 23 AACTGAGATTGGCTTTAAGAGA 2

RESULT 261
AAQ02161
ID AAQ02161 standard; DNA; 23 BP.
XX
AC AAQ02161;
XX
DT 23-APR-1999 (first entry)
XX
XX Human IVS17 3'-acceptor splice site PCR primer #9.
DE
XX IVS17 acceptor splice site; PCR primer; detection; base-pair mutation;
XX heteroduplex; homoduplex; migration; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX US5874212-A.
XX
XX 23-FEB-1999.
XX
XX 06-JUN-1995; 95US-00468551.
XX
XX 13-MAY-1993; 93US-00061574.
XX
XX (UYJE-) UNIV JEFFERSON THOMAS.
XX
XX Ganguly A, Rock MJ, Prockop DJ;
XX WPI; 1999-179967/15.
XX
XX Detection of nucleic acid mutations - by electrophoresis in
XX polyacrylamide gel that distinguishes heteroduplexes from homoduplexes.
XX
XX Disclosure; Col 5; 16pp; English.
XX
XX AAQ02153-X02161 are primers used in a method for detecting one or more
XX base-pair mutations in a nucleic acid sequence by differentiating
XX heteroduplexes from homoduplexes. The method involves generating
XX homoduplexes and heteroduplexes in a sample and performing gel
XX electrophoresis on the sample using a polyacrylamide gel that causes
XX heteroduplexes to migrate more slowly than homoduplexes. The gel
XX comprises 3-20% polyacrylamide, 1-50% of at least one denaturing agent
XX selected from aliphatic alcohols, cyclic alcohols, alicyclic compounds,
XX amides, ureas and carbamates, 10-100 mM borate-free TE [Tris-HCl, EDTA]
XX buffer, and 10-100 mM taurine. The method has a high reliability and can
XX be improved by allowing for the presence of the mutations in domains with
XX high melting temperatures. These primers can specifically detect a
XX mutation in the human IVS17 3'-acceptor splice site
XX
XX Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 23;
Best Local Similarity 81.8%; Pred. No. 5.5e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 36 GTAGGAGGAGGAGGAGGAGGAGT 57
DB 1 GAAGCCAGGAGGAGGAGGAGGAGT 22

RESULT 262
ADP11359
ID ADP11359 standard; DNA; 23 BP.
XX
XX ADP11359;
AC
```

XX	12-AUG-2004	(first entry)
DT	Tagman probe of the invention #42.	
XX	transplant rejection; immune system; rheumatoid arthritis; lupus;	
DE	inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; probe.	
XX	Homo sapiens.	
OS	WO2004042346-A2.	
PN	21-MAY-2004.	
PD	24-APR-2003; 2003WO-US012946.	
XX	24-APR-2002; 2002US-00131831.	
XX	20-DEC-2002; 2002US-00325899.	
PR	(EXPR-) EXPRESSION DIAGNOSTICS INC.	
XX	Wohlgenuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;	
PI	Rosenberg S;	
PI	WPI; 2004-400724/37.	
DR	Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,	
XX	pancreas, pancreatic islet, lung, bone marrow or stem cell transplant	
PT	rejection, in an individual, comprises detecting the expression level of	
PT	the genes.	
XX	Claim 58; SEQ ID NO 1368; 1762pp; English.	
PS	The present invention relates to diagnosing or monitoring transplant	
XX	rejection, e.g. cardiac or kidney transplant rejection, in an individual	
CC	comprises detecting the expression level of one or more genes. The	
CC	methods, system and kits are useful in diagnosing or monitoring	
CC	transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic	
CC	islet, lung, bone marrow or stem cell transplant rejection,	
CC	xenotransplant rejection or mechanical organ replacement rejection, in an	
CC	individual. The method is also useful in assessing the immune status of	
CC	an individual. The methods are also useful in diagnosing and monitoring	
CC	diseases that involve the immune system, e.g. rheumatoid arthritis,	
CC	lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or	
CC	viral, bacterial or fungal infection. The present sequence represents a	
CC	Tagman probe for a 50 mer oligonucleotide marker for diagnosis and	
CC	monitoring of allograft rejection and other disorders.	
XX	Sequence 23 BP; 6 A; 12 C; 3 G; 2 T; 0 U; 0 Other;	
SQ	Query Match 0.9%; Score 15.6; DB 1; Length 23;	
	Best Local Similarity 81.8%; Pred. No. 5.5e+02;	
	Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0	
QY	979 GACCTCAAGCCCCGAACTGC 1000	
Db	2 GCCCTCAACCAACCAACTGC 23	
RESULT 263		
AAHA0717		
ID	AAH40717 standard; DNA; 24 BP.	
XX	AAH40717;	
XX		
DT	14-AUG-2001 (first entry)	
XX	SNP specific upper PCR primer SEQ ID 3513.	
DE		
XX	Single nucleotide polymorphism; SNP; single nucleotide primer extension;	
KW	SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;	
KW	Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;	
KW	polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;	

KW	acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; ss.
KW	
XX	Homo sapiens.
XX	
PN	WO200129262-A2.
XX	
PD	26-APR-2001.
XX	
PF	13-OCT-2000; 2000WO-US028436.
XX	
PR	15-OCT-1999; 99US-0160096P.
XX	
PA	(ORCH-) ORCHID BIOSCIENCES INC.
XX	
PI	Picoult-Newburg L, Pohl M;
XX	
DR	WPI; 2001-290930/30.
XX	
PT	New genotyping oligonucleotide, useful for detecting the presence,
PT	absence or identity of single polynucleotide polymorphism in a nucleic
PT	acid sample.
XX	
PS	Claim 1; Page 67; 83pp; English.
XX	
CC	Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
CC	primer extension (SNPE) primers, and the sequences of regions flanking
CC	sites of single nucleotide polymorphisms SNPs. The present invention
CC	includes kits for determining the presence or absence of a SNP, using the
CC	oligonucleotides of the invention. The PCR primers are used to amplify a
CC	SNP flanking sequence, the SNPE primer is used as a genotyping primer.
CC	The oligonucleotides are useful for genotyping a nucleic acid sample by
CC	performing a single-nucleotide primer extension reaction. The
CC	oligonucleotides are useful for determining the presence, absence or
CC	identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC	assess by association analysis the genotype of an individual or group of
CC	individuals, having a pathological phenotypic trait suspected of being
CC	caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC	agamaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC	dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC	osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC	traits also include symptoms of or susceptibility to multifactorial
CC	disease of which a component is or may be genetic such as autoimmune
CC	diseases, including, rheumatoid arthritis, multiple sclerosis,
CC	inflammation, cancer, nervous system diseases and infection by pathogenic
CC	microorganism. The method is also useful in forensic investigations and
CC	paternity analysis. The present sequence represents a PCR primer specific
CC	for a human SNP containing DNA sequence
XX	
SQ	Sequence 24 BP; 10 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
Query Match	0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity	81.8%; Pred. No. 5.8e+02;
Matches	16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy	1310 AGACATACAACTACCCCAAGTA 1331
Db	3 ACACACATCTACCCCAAGGA 24
RESULT 264	
ABS54362/c	
ID	ABS54362 standard; DNA; 24 BP.
XX	
AC	ABS54362;
XX	
DT	23-DEC-2002 (first entry)
XX	
DE	Mucor circinelloides PKAC, primer pkaCrev.
XX	
KW	Morphology regulator; dimorphic fungal cell; fungal host organism;
KW	recombinant protein expression; growth; low viscosity; protein secretion;
KW	filamentous fungus; PKAC; primer; ss.

KW CAMP-dependent protein kinase A catalytic subunit.
XX Mucor circinelloides.
OS WO200270721-A2.
XX
PN
XX
PD 12-SEP-2002.
XX
PF 08-MAR-2002; 2002WO-DK000157.
XX
PR 08-MAR-2001; 2001DK-00000395.
PR 12-MAR-2001; 2001US-027450P.
XX
PA (BIOT-) BIOTEKNOLOGISK INST.
XX
PI Wolff AM, Appel KF, Petersen JB, Poulsen U, Arnau J, Jacobsen MD;
XX
XX WPI; 2002-723266/78.
DR
XX New isolated polynucleotide encoding at least one regulator of morphology
PT capable of regulating the morphology of a dimorphic fungal cell, useful
PT for producing and/or secreting large quantities of commercially valuable
PT proteins.
XX
PS Example 2; Page 120; 296pp; English.
XX
CC The present invention relates to the isolation of polynucleotide
CC sequences encoding at least one regulator of morphology and capable of
CC regulating the morphology of a dimorphic fungal cell, and operably linked
CC to a nucleotide sequence comprising an expression signal capable of
CC directing the expression of the first sequence in a dimorphic fungal
CC cell, where the sequences are not natively associated. The invention
CC provides fungal host organisms capable of expressing recombinant proteins
CC while at the same time exhibiting homogeneous growth and low viscosity
CC characteristics. The fungal host organism has the capability for high
CC protein secretion normally associated with filamentous fungi. The
CC dimorphic fungal cells are useful for increasing production and/or
CC secretion of large quantities of commercially valuable proteins. The
CC present sequence represents a primer used in the examples of the present
CC invention
XX
XX Sequence 24 BP; 2 A; 3 C; 2 G; 7 T; 0 U; 10 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 52.2%; Pred. No. 5.8e+02;
Matches 12; Conservative 7; Mismatches 4; Indels 0; Gaps 0;
QY 974 ACCGAGACCTCAAGCCCGAAGC 996
DB 23 ATMGNGAYYTNARCCNGARAY 1
RESULT 265
ABK90912/c
ID ABK90912 standard; DNA; 24 BP.
XX
AC ABK90912;
XX
XX 05-NOV-2002 (first entry)
XX
XX Fruit fly LRR47 polypeptide 47-33.88, RT-PCR primer 1.
DE
XX
XX Fruit fly; LRR47 polypeptide 47-33.88; embryonic development deformity;
KW tumour; diabetes; menstrual disorder; peptide ulcer; arrhythmia; anaemia;
KW epilepsy; reverse transcriptase PCR; RT-PCR; primer; ss.
XX
XX Drosophila sp.
OS
XX
XX CN1341640-A.
PN
XX
XX 27-MAR-2002.
PD
XX
XX 05-SEP-2000; 2000CN-00125025.
PF

XX 05-SEP-2000; 2000CN-00125025.
PR (SHAN-) SHANGHAI BIODOOR GENE DEV CO LTD.
XX
XX Mao Y, Xie Y;
PI
XX WPI; 2002-520716/56.
DR
XX A fruit fly LRR47 polypeptide 47-33.88, useful for curing e.g. tumors and
XX diabetes.
PT
XX Example 3; Page 18 (Disclosure); 33pp; Chinese.
PS
XX The present invention relates to a new fruit fly LRR47 polypeptide 47-
CC 33.88. The polypeptide is useful for curing several diseases, such as
CC embryonic development deformity, tumour, diabetes, menstrual disorder,
CC peptide ulcer, arrhythmia, anaemia and epilepsy. The present nucleic acid
CC sequence represents a reverse transcriptase (RT)-PCR primer that was used
CC in the methods of the invention to isolate the coding sequence of the
CC fruit fly LRR47 polypeptide 47-33.88
XX
XX Sequence 24 BP; 1 A; 8 C; 13 G; 2 T; 0 U; 0 Other;
QY 732 GGCACCTGACCGCGCATCGG 753
DB 23 GGCACCGCGCGCGCATCGG 2
RESULT 266
ABQ10087
ID ABQ10087 standard; DNA; 24 BP.
XX
AC ABQ10087;
XX
XX 11-JUN-2002 (first entry)
DT
XX
XX Oligonucleotide adapter/capture probe 10078.
DE
XX
XX Oligonucleotide array; adapter sequence; probe; ss.
KW
XX
XX Synthetic.
OS
XX
XX WO200216649-A2.
PN
XX
XX 28-FEB-2002.
PD
XX
XX 27-AUG-2001; 2001WO-US026519.
PF
XX
XX 25-AUG-2000; 2000US-0227948P.
PR
XX 29-AUG-2000; 2000US-0228854P.
PR
XX (ILLU-) ILLUMINA INC.
PA
XX
XX Gunderson K;
PI
XX
XX WPI; 2002-292068/33.
DR
XX
XX Array comprising adapter sequences useful for immobilizing or detecting a
PT target nucleic acid sequence, has different addresses comprising
PT different specific capture probes.
PT
XX
XX Claim 1; Page 213; 261pp; English.
PS
XX
XX The invention relates to an oligonucleotide array (I) comprising at least
CC 25 different addresses (adapter sequences) with each comprising a
CC different capture probe selected from a group consisting of the sequences
CC given in ABQ00010-ABQ3409. (I) is useful for immobilising a target
CC nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
CC

CC ABQ13409) to a target nucleic acid to form a modified target nucleic acid
CC and contacting the modified target nucleic acid with (I). The steps of
CC above method is useful for detecting a target nucleic acid, which further
CC comprises detecting the presence of the modified target nucleic acid

XX SQ Sequence 24 BP; 7 A; 9 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 5.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 542 TCCTTGACAGCCCTCAGCG 563
||| ||||| ||||| ||||| |||||
Db 3 TCCTGGACAGACCTCAACCG 24

RESULT 267
ABQ10128/c
ID ABQ10128 standard; DNA; 24 BP.

XX AC ABQ10128;

XX DT 11-JUN-2002 (first entry)

XX DE Oligonucleotide adapter/capture probe 10119.

XX KW Oligonucleotide array; adapter sequence; probe; ss.

XX OS Synthetic.

XX PN WO200216649-A2.

XX PD 28-FEB-2002.

XX PF 27-AUG-2001; 2001WO-US026519.

XX PR 25-AUG-2000; 2000US-0227948P.

XX PR 29-AUG-2000; 2000US-0228854P.

XX PA (ILLU-) ILLUMINA INC.

XX PI Gunderson K;

XX DR WPI; 2002-292068/33.

XX PT Array comprising adapter sequences useful for immobilizing or detecting a
XX target nucleic acid sequence, has different addresses comprising
XX different specific capture probes.

XX PS Claim 1; Page 213; 261pp; English.

XX CC The invention relates to an oligonucleotide array (I) comprising at least
XX 25 different addresses (adapter sequences) with each comprising a
XX different capture probe selected from a group consisting of the sequences
XX given in ABQ00010-ABQ13409. (I) is useful for immobilising a target
XX nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
XX ABQ13409) to a target nucleic acid to form a modified target nucleic acid
XX and contacting the modified target nucleic acid with (I). The steps of
XX above method is useful for detecting a target nucleic acid, which further
XX comprises detecting the presence of the modified target nucleic acid

XX SQ Sequence 24 BP; 4 A; 4 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 5.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 542 TCCTTGACAGCCCTCAGCG 563
||| ||||| ||||| ||||| |||||
Db 22 TCCTGGACAGACCTCAACCG 1

RESULT 268

ABQ03115
ID ABQ03115 standard; DNA; 24 BP.

XX AC ABQ03115;

XX DT 11-JUN-2002 (first entry)

XX DE Oligonucleotide adapter/capture probe 3106.

XX KW Oligonucleotide array; adapter sequence; probe; ss.

XX OS Synthetic.

XX PN WO200216649-A2.

XX PD 28-FEB-2002.

XX PF 27-AUG-2001; 2001WO-US026519.

XX PR 25-AUG-2000; 2000US-0227948P.

XX PR 29-AUG-2000; 2000US-0228854P.

XX PA (ILLU-) ILLUMINA INC.

XX PI Gunderson K;

XX DR WPI; 2002-292068/33.

XX PT Array comprising adapter sequences useful for immobilizing or detecting a
XX target nucleic acid sequence, has different addresses comprising
XX different specific capture probes.

XX PS Claim 1; Page 118; 261pp; English.

XX CC The invention relates to an oligonucleotide array (I) comprising at least
XX 25 different addresses (adapter sequences) with each comprising a
XX different capture probe selected from a group consisting of the sequences
XX given in ABQ00010-ABQ13409. (I) is useful for immobilising a target
XX nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
XX ABQ13409) to a target nucleic acid to form a modified target nucleic acid
XX and contacting the modified target nucleic acid with (I). The steps of
XX above method is useful for detecting a target nucleic acid, which further
XX comprises detecting the presence of the modified target nucleic acid

XX SQ Sequence 24 BP; 7 A; 9 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 5.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 542 TCCTTGACAGCCCTCAGCG 563
||| ||||| ||||| ||||| |||||
Db 3 TCCTGGACAGACCTCAACCG 24

RESULT 269
AB184591
ID AB184591 standard; DNA; 24 BP.

XX AC AB184591;

XX DT 15-FEB-2002 (first entry)

XX DE Capture oligonucleotide Zip ID#1097 oligo #2.

XX KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
XX ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
XX infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
XX oncogene; tumour suppressor; human papillomavirus; forensic;
XX environmental monitoring; food industry; feed industry; ss.

XX OS Synthetic.

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PN WO200179548-A2.
XX
XX
PD 25-OCT-2001.
XX
XX PF 04-APR-2001; 2001WO-US010958.
XX
XX PR 14-APR-2000; 2000US-0197271P.
XX
XX PA (CORR ) CORNELL RES FOUND INC.
XX
XX PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
XX DR WPI; 2002-034366/04.
XX
XX PT Designing capture oligonucleotide probes for use on a support to which
XX PT complementary oligonucleotides hybridize with little mismatch.
XX
XX PS Example 5; Fig 25; 300pp; English.
XX
XX CC The present invention describes a method (M1) for designing capture
XX CC oligonucleotide probes (I) for use on a support to which complementary
XX CC oligonucleotide probes (II) will hybridize with little mismatch, where
XX CC (I) have melting temperatures within a narrow range. The method is useful
XX CC for detecting infectious diseases caused by bacterial infectious agents
XX CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
XX CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
XX CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
XX CC Epstein-Barr virus and polio virus, and parasitic infectious agents
XX CC selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus
XX CC medinensis. The method is also useful for detecting genetic diseases such
XX CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
XX CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
XX CC involved in DNA amplification, replication, recombination or repair, the
XX CC cancer is specifically associated with a gene selected from BRCA1 gene,
XX CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
XX CC method is also used for environmental monitoring, forensics and the food
XX CC and feed industry, detecting comprises scanning (using e.g. a scanning
XX CC electron microscope and infrared microscope) the support at the
XX CC particular sites and identifying if ligation of the oligonucleotide probe
XX CC sets occurred and correlating (using a computer) identified ligation to a
XX CC presence or absence of the target nucleotide sequences. ABI82074 to
XX CC ABI97546 represent oligonucleotide sequences used in the exemplification
XX CC of the present invention
XX
XX SQ Sequence 24 BP; 4 A; 9 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 5.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1279 TGGCCAGGCACTCTGTCTCAACG 1300
DB 3 TGCCGTGACATCTGTCTCAACG 24
RESULT 270
ABI82867
ID ABI82867 standard; DNA; 24 BP.
XX
XX AC ABI82867;
XX
XX DT 15-FEB-2002 (first entry)
XX
XX DE Capture oligonucleotide Zip ID#235 oligo #2.
XX
XX KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
XX KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
XX KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
XX KW oncogene; tumour suppressor; human papillomavirus; forensic;
XX KW environmental monitoring; food industry; feed industry; ss.
XX
XX OS Synthetic.
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PN WO200179548-A2.
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XX
PD 25-OCT-2001.
XX
XX PF 04-APR-2001; 2001WO-US010958.
XX
XX PR 14-APR-2000; 2000US-0197271P.
XX
XX PA (CORR ) CORNELL RES FOUND INC.
XX
XX PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
XX DR WPI; 2002-034366/04.
XX
XX PT Designing capture oligonucleotide probes for use on a support to which
XX PT complementary oligonucleotides hybridize with little mismatch.
XX
XX PS Example 5; Fig 25; 300pp; English.
XX
XX CC The present invention describes a method (M1) for designing capture
XX CC oligonucleotide probes (I) for use on a support to which complementary
XX CC oligonucleotide probes (II) will hybridize with little mismatch, where
XX CC (I) have melting temperatures within a narrow range. The method is useful
XX CC for detecting infectious diseases caused by bacterial infectious agents
XX CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
XX CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
XX CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
XX CC Epstein-Barr virus and polio virus, and parasitic infectious agents
XX CC selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus
XX CC medinensis. The method is also useful for detecting genetic diseases such
XX CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
XX CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
XX CC involved in DNA amplification, replication, recombination or repair, the
XX CC cancer is specifically associated with a gene selected from BRCA1 gene,
XX CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
XX CC method is also used for environmental monitoring, forensics and the food
XX CC and feed industry, detecting comprises scanning (using e.g. a scanning
XX CC electron microscope and infrared microscope) the support at the
XX CC particular sites and identifying if ligation of the oligonucleotide probe
XX CC sets occurred and correlating (using a computer) identified ligation to a
XX CC presence or absence of the target nucleotide sequences. ABI82074 to
XX CC ABI97546 represent oligonucleotide sequences used in the exemplification
XX CC of the present invention
XX
XX SQ Sequence 24 BP; 3 A; 6 C; 8 G; 7 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 5.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1118 TCCTGCTTGGGTCCACGACTA 1139
DB 3 TCCTGCTTGGGTCCATGGACGA 24
RESULT 271
ABI92132/c
ID ABI92132 standard; DNA; 24 BP.
XX
XX AC ABI92132;
XX
XX DT 15-FEB-2002 (first entry)
XX
XX DE Capture oligonucleotide Zip ID#235 oligo #3.
XX
XX KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
XX KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
XX KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
XX KW oncogene; tumour suppressor; human papillomavirus; forensic;
XX KW environmental monitoring; food industry; feed industry; ss.
XX
XX OS Synthetic.
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PN WO200179548-A2.
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PD 25-OCT-2001.
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PF 04-APR-2001; 2001WO-US010958.
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PR 14-APR-2000; 2000US-0197271P.
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XX
PA (CORR ) CORNELL RES FOUND INC.
XX
XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
XX
DR WPI; 2002-034366/04.
XX
XX
PT Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
XX
PS Claim 3; Fig 26; 300pp; English.
XX
XX
CC The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridize with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI82074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
XX
SQ Sequence 24 BP; 7 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 5.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1118 TCCTGCTTGGTCCACGGACTA 1139
Db 22 TCTTGCTTCGGTCCATGGACGA 1
RESULT 272
ABI92133
ID ABI92133 standard; DNA; 24 BP.
XX
XX
AC ABI92133;
XX
XX
DT 15-FEB-2002 (first entry)
XX
XX
DE Capture oligonucleotide Zip ID#235 oligo #4.
XX
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
XX
OS Synthetic.
XX

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PN WO200179548-A2.
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PD 25-OCT-2001.
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PF 04-APR-2001; 2001WO-US010958.
XX
XX
PR 14-APR-2000; 2000US-0197271P.
XX
XX
PA (CORR ) CORNELL RES FOUND INC.
XX
XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
XX
DR WPI; 2002-034366/04.
XX
XX
PT Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
XX
PS Claim 3; Fig 26; 300pp; English.
XX
XX
CC The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridize with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI82074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
XX
SQ Sequence 24 BP; 3 A; 6 C; 8 G; 7 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 5.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1118 TCCTGCTTGGTCCACGGACTA 1139
Db 3 TCTTGCTTCGGTCCATGGACGA 24
RESULT 273
ABI82866/c
ID ABI82866 standard; DNA; 24 BP.
XX
XX
AC ABI82866;
XX
XX
DT 15-FEB-2002 (first entry)
XX
XX
DE Capture oligonucleotide Zip ID#235 oligo #1.
XX
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
XX
OS Synthetic.
XX

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PN WO200179548-A2.
XX
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PD 25-OCT-2001.
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PF 04-APR-2001; 2001WO-US010958.
XX
XX
PR 14-APR-2000; 2000US-0197271P.
XX
XX
PA (CORR ) CORNELL RES FOUND INC.
XX
XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
XX
DR WPI; 2002-034366/04.
XX
XX
PT Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
XX
PS Example 5; Fig 25; 300pp; English.
XX
XX
CC The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridise with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
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CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. AB182074 to
CC AB197546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
XX
SQ Sequence 24 BP; 7 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 5.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1118 TCCTGCTTGGTCCAGGACTA 1139
Db 22 TCTTGCTTCGGTCCATGGACGA 1
RESULT 274
AB184590/c
ID AB184590 standard; DNA; 24 BP.
XX
XX
AC AB184590;
XX
XX
DT 15-FEB-2002 (first entry)
XX
XX
DE Capture oligonucleotide Zip ID#1097 oligo #1.
XX
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
XX
OS Synthetic.
XX

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PN WO200179548-A2.
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PD 25-OCT-2001.
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PF 04-APR-2001; 2001WO-US010958.
XX
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PR 14-APR-2000; 2000US-0197271P.
XX
XX
PA (CORR ) CORNELL RES FOUND INC.
XX
XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
XX
DR WPI; 2002-034366/04.
XX
XX
PT Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
XX
PS Example 5; Fig 25; 300pp; English.
XX
XX
CC The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridise with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. AB182074 to
CC AB197546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
XX
SQ Sequence 24 BP; 5 A; 6 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 5.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1279 TGCCAGGATCTCTGTCCACG 1300
Db 22 TGCCGTGACATCTGTCCACG 1
RESULT 275
ADL61761
ID ADL61761 standard; DNA; 24 BP.
XX
XX
AC ADL61761;
XX
XX
DT 20-MAY-2004 (first entry)
XX
XX
DE PCR primer 1 used to amplify human Ig heavy chain VH4-4 region.
XX
XX
KW chicken embryonic stem cell; B lymphocyte; polyclonal antibody; PCR;
KW primer; ss; human; immunoglobulin heavy chain; VH4-4.
XX
XX
OS Homo sapiens.
XX
XX
PN WO2003081993-A2.
XX
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PD 09-OCT-2003.

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XX 24-MAR-2003; 2003WO-US009288.
XX 22-MAR-2002; 2002US-00104057.
XX (ORIG-) ORIGIN THERAPEUTICS.
XX Etches RJ, Kay RM, Leighton P, Zhu L;
XX WPI; 2003-812491/76.
XX New composition comprising a sustained culture of chicken embryonic stem
XX (ES) cells, useful for preparing human polyclonal antibodies for human
XX therapy.
XX Example 6; SEQ ID NO 17; 71pp; English.
XX The invention relates to a novel composition comprising a sustained
XX culture of chicken embryonic stem (ES) cells with a transgene stably
XX integrated into the genome of substantially all of the progeny of the ES
XX cells, which contribute to B lymphocytes of a chimeric chicken produced
XX by the injection of the ES cell progeny into a chicken embryo. The
XX composition of the invention may be useful for preparing human polyclonal
XX antibodies for human therapy. The current sequence is that of the PCR
XX primer 1 of the invention which was used to amplify human immunoglobulin
XX heavy chain VH4-4 region.
XX Sequence 24 BP; 10 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.6; DB 1; Length 24;
XX Best Local Similarity 81.8%; Pred. No. 5.8e+02;
XX Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 762 CCTGCTCAAGGACCTCAACAC 783
XX 1 CCTGCACAGAACATGAACAC 22
XX
XX RESULT 276
XX ADI03803/c
XX ID ADI03803 standard; DNA; 24 BP.
XX AC ADI03803;
XX
XX 22-APR-2004 (first entry)
XX Mouse Ly6g6d cDNA analysing primer MG6DRT2.
XX LY-6; medicament; gene expression; LY6G6C; LY6G6D; LY6G6E; LY6G5C;
XX LY6G5B; PCR; primer; ss.
XX Mus sp.
XX WO2004001034-A2.
XX 31-DEC-2003.
XX 20-JUN-2003; 2003WO-GB002652.
XX 24-JUN-2002; 2002GB-00014524.
XX (MEDI-) MEDICAL RES COUNCIL.
XX Aguado B, Campbell RD, Mallya M;
XX WPI; 2004-099121/10.
XX New isolated nucleic acid molecule comprising a part of the sequence of
XX intron 1 of a human LY-6 superfamily gene or of a homologous gene from an
XX animal, useful for preparing a medicament to regulate gene expression in
XX subjects.
XX Example 3; Page 38; 59pp; English.

XX The invention relates to an isolated nucleic acid molecule comprising at
XX least part of the sequence of intron 1 of a human LY-6 superfamily gene
XX or of a homologous gene from an animal, or a corresponding sequence. The
XX sequence comprises at least part of intron 1 of a gene selected from all
XX LY-6 genes, CD59, UPAR, SP10, SLURP-1, E48, RIG-E, PSCA, ThB and TSA-
XX 1/Sca2. The nucleic acid molecule is useful in preparing a medicament to
XX regulate the expression of a gene in a subject. Sequences ADI03768-
XX ADI03810 represent primers used in cDNA analysis of human and mouse MHC
XX class III region LY-6 superfamily members (LY6G6C, LY6G6D, LY6G6E, LY6G5C
XX and LY6G5B).
XX Sequence 24 BP; 5 A; 6 C; 7 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.6; DB 1; Length 24;
XX Best Local Similarity 81.8%; Pred. No. 5.8e+02;
XX Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 1288 ATCTGTCTCAAGGAGGTTC A 1309
XX 23 ATCCGACCAACTGGGAGTTCA 2
XX
XX RESULT 277
XX ABK19257
XX ID ABK19257 standard; RNA; 17 BP.
XX AC ABK19257;
XX
XX 09-APR-2002 (first entry)
XX Human ERG Amberzyme target sequence Seq ID No 1904.
XX
XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;
XX Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
XX amberzyme.
XX Homo sapiens.
XX WO200188124-A2.
XX 22-NOV-2001.
XX 16-MAY-2001; 2001WO-US015866.
XX 16-MAY-2000; 2000US-00572021.
XX (RIBO-) RIBOZYME PHARM INC.
XX (GLAX) GLAXO GROUP LTD.
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
XX Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX Claim 4; Page 124; 149pp; English.
XX The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu

CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC creating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angio genesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg²⁺. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention
XX Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
SQ

Query Match 0.9%; Score 15.4; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.6e+02;
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1295 CCAACGAGGAGTTCAG 1311
||||| ||||| ||||| |||||
DB 1 CCAACGGGAGGUUCAAG 17

RESULT 278
ABS75018
ID ABS75018 standard; DNA; 17 BP.
XX
AC ABS75018;
XX
DT 24-DEC-2002 (first entry)
XX
DE Human PAPP-Ea associated 17-mer SEQ ID 544.
XX
KW PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW dysgenetic pregnancy; primer; ss.
XX
OS Homo sapiens.
XX
PN US2002102252-A1.
XX
PD 01-AUG-2002.
XX
PF 06-APR-2001; 2001US-00827998.
XX
PR 26-MAY-2000; 2000US-0207456P.
XX
PA (GUY/) GU Y.
PA (SHAN/) SHANNON M E.
XX
PI Gu Y, Shannon ME;
XX
DR WPI; 2002-697817/75.
XX
PT New isolated nucleic acid encoding an isoform of human pregnancy
associated plasma protein E, for preventing or aborting pregnancy.
XX
PS Example 2; Page 146; 353pp; English.
XX
CC This invention describes a novel isolated nucleic acid that encodes one
CC of three new isoforms of human pregnancy associated plasma protein E,
CC hPAPP-E. The products of the invention have abortive and contraceptive
CC activity and can be used for gene therapy or in a vaccine. The nucleic
CC acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC used in pharmaceutical compositions or vaccines for preventing or
CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of

CC dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC antibodies can be used to assess the expression levels of PAPP-E isoform
CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC antenatally. This sequence represents an oligomer used in scanning the
CC human PAPP-E genes described in the disclosure of the invention
XX
SQ Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 287 AACTTCGTTCTGCACGG 303
||||| ||||| ||||| |||||
DB 1 AACTTCGTTCTGCACGG 17

RESULT 279
ABK57128
ID ABK57128 standard; RNA; 17 BP.
XX
AC ABK57128;
XX
DT 02-JUL-2002 (first entry)
XX
DE Human CLCA1 gene enzymatic nucleic acid #1499.
XX
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX
OS Homo sapiens.
XX
PN WO200211674-A2.
XX
PD 14-FEB-2002.
XX
PF 09-AUG-2001; 2001WO-US024970.
XX
PR 09-AUG-2000; 2000US-0224383P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (SYNT) SYNTEX USA LLC.
PA (THOM/) THOMPSON J.
XX
PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
PI Grupe A;
XX
DR WPI; 2002-217145/27.
XX
PT Enzymatic polynucleotide that down regulates expression of chloride
channel calcium activated gene, useful for treating Chronic obstructive
pulmonary disease (COPD), chronic bronchitis and asthma.
XX
PS Claim 4; Page 96; 152pp; English.
XX
CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to

CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention
XX
SQ Sequence 17 BP; 4 A; 5 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 4.6e+02;
Matches 12; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1573 TCAGGCGGCGAGCTTT 1589
DB 1 UCAAGCAGCGCCAGCUU 17

RESULT 280
ACN10393
ID ACN10393 standard; RNA; 17 BP.
XX
AC ACN10393;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV minus strand Inozyme substrate SEQ ID NO 10396.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
DR WPI; 2002-706994/76.
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 10396; 495pp; English.
XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
SQ Sequence 17 BP; 6 A; 10 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 4.6e+02;
Matches 12; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

Best Local Similarity 94.1%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 429 CAACCATCCCCCAGCA 445
DB 1 CAACCAACCCCGCAGCA 17

RESULT 281
ACN06744/c
ID ACN06744 standard; RNA; 17 BP.
XX
AC ACN06744;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV Amberzyme substrate SEQ ID NO 6747.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
DR WPI; 2002-706994/76.
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 6747; 495pp; English.
XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
SQ Sequence 17 BP; 0 A; 1 C; 10 G; 0 T; 6 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 429 CAACCATCCCCCAGCA 445
DB 1 CAACCAACCCCGCAGCA 1

RESULT 282
ACC65856
ID ACC65856 standard; DNA; 17 BP.
XX AC
XX ACC65856;
XX AC
DT 01-JUL-2003 (first entry)
XX Murine oligonucleotide associated with tumour suppression, SEQ ID 3103.
DE DE
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
XX Tumour suppression; tumour regression; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
OS Mus musculus.
XX
XX WO2003025176-A2.
PN
XX
XX 27-MAR-2003.
PD
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
XX 17-SEP-2001; 2001FR-00011979.
PR
XX (MOLE-) MOLECULAR ENGINES LAB.
PA
XX Telerman A, Amson R, Tuijnder M;
PI WPI; 2003-333167/31.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
PT
XX Disclosure; Page 393; 738pp; French.
PS
XX The present invention relates to murine oligonucleotides (ACC62754-
CC ACC6806), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (ant)sense reagents; and (2) for production of
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
XX Sequence 17 BP; 6 A; 1 C; 7 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 4.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 127 GATCGATGAGAGAT 143
DB 1 GATCGATGAGAGAT 17
RESULT 283
AAT12600/C
ID AAT12600 standard; DNA; 19 BP.
XX
XX AAT12600;
AC
XX 31-DEC-1996 (first entry)
DT
XX Human Ty protease cDNA PCR primer Ty 3.2.
DE
XX Interleukin-1 beta converting enzyme; ICE; protease; apoptosis;
KW induction; inflammation; autoimmune disease; neurodegeneration; cancer;
KW infection; treatment; Ty protein; polymerase chain reaction;
KW

amplification primer; ss.
XX
OS Synthetic.
XX
PN WO9604387-A1.
XX
XX 15-FEB-1996.
PD
XX 01-AUG-1995; 95WO-PR001035.
PF
XX 02-AUG-1994; 94FR-00009567.
PR
XX (ROUS) ROUSSEL-UCLAF.
PA
XX Diu A, Faucheu C, Hercend T, Lalanne J, Livingston DJ, Su MS;
PI WPI; 1996-129403/13.
XX
DR New DNA encoding human protease(s) that induce apoptosis - and cause
XX maturation of interleukin converting enzyme, useful e.g. in treating
PT autoimmune diseases.
PT
XX Example 3; Page 26; 88pp; French.
PS
XX The present sequence is that of a PCR primer used for isolating the 3'-
CC end of a cDNA sequence coding for the human protease designated Ty which
CC is related to the interleukin-1 beta converting enzyme (ICE) and which
CC induces apoptosis. The Ty protein has over 70% homology to Tx which
CC converts the p30 precursor of ICE into 20 kD and 10 kD fragments and can
CC be used for treating diseases which respond to ICE, e.g. inflammation.
CC The ability to induce apoptosis will be useful for treating cancer
XX
XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 5.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1436 AGGATGCCATGAACAT 1452
DB 18 AGGATGCCATGAACAT 2
RESULT 284
AAB82722
ID AAB82722 standard; DNA; 19 BP.
XX
XX AAB82722;
AC
XX 04-DEC-2000 (first entry)
DT
XX cdk3 ribozyme binding site #7.
DE
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
KW
XX Mammalia.
OS
XX WO200032765-A2.
PN
XX 08-JUN-2000.
PD
XX 06-DEC-1999; 99WO-US028772.
PF
XX 04-DEC-1998; 98US-0110954P.
PR
XX (IMMU-) IMMUSOL INC.
PA
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
PI WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT

PT PCNA and Cyclin B1.
 XX Disclosure; Page 50; 109pp; English.
 XX
 CC The present invention relates to a hairpin or hammerhead ribozyme,
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment
 XX
 SQ Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.4; DB 1; Length 19;
 Best Local Similarity 94.1%; Pred. No. 5.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 703 AAGGAGATCAGACTGGA 719
 Db 2 AAGAAGATCAGACTGGA 18
 ||| ||||| ||||| |||||
 RESULT 285
 AAH57884
 ID AAH57884 standard; DNA; 19 BP.
 AC AAH57884;
 XX
 DT 10-SEP-2001 (first entry)
 XX
 DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:308.
 XX
 KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
 KW recognition site; target; ribozyme binding site; eye disease; vulnary;
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
 KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
 KW antiscaling; ophthalmological; keratolytic; gene therapy; viral wart;
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
 KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
 KW sickle cell retinopathy; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FN WO200130362-A2.
 XX
 PD 03-MAY-2001.
 XX
 PF 26-OCT-2000; 2000WO-US029500.
 XX
 XX 26-OCT-1999; 99US-0161532P.
 XX
 PA (IMMU-) IMMUSOL INC.
 XX
 XX Robbins JM, Tritz R;
 PI
 XX WPI; 2001-300427/31.
 DR
 XX
 XX Treating proliferative skin or eye diseases and scarring, using ribozymes
 PT that cleave RNA encoding cytokines involved in inflammation, matrix
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.
 XX
 XX Example 1; Page 94; 408pp; English.
 PS
 XX The present invention describes a method for treating a proliferative
 CC skin or eye disease and scarring. The method involves administering a
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
 CC dependent kinase, growth factor or a reductase, or administering a

CC nucleic acid molecule (II) comprising a promoter operably linked to a
 CC nucleic acid segment encoding (I). (I) can have antiproliferative,
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiscaling,
 CC ophthalmological, vulnerary, keratolytic and virucide activities, and
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
 CC also be used for treating proliferative eye diseases such as diabetic
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
 CC prematurity and retinal detachment, and for treating and preventing
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
 CC scar. AAH57577 to AAH62099 represent sequences used in the
 CC exemplification of the present invention
 XX
 SQ Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.4; DB 1; Length 19;
 Best Local Similarity 94.1%; Pred. No. 5.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 703 AAGGAGATCAGACTGGA 719
 Db 2 AAGAAGATCAGACTGGA 18
 ||| ||||| ||||| |||||
 RESULT 286
 ADE29583/C
 ID ADE29583 standard; RNA; 19 BP.
 XX
 AC ADE29583;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:205.
 XX
 KW short interfering nucleic acid; siNA; downregulation; inhibition;
 KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
 KW cytostatic; anorectic; antidiabetic; antiinflammatory; antiarthritic;
 KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
 KW antiproliferative; gastrointestinal; obesity; diabetes; tumour;
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
 KW psoriasis; inflammatory bowel disease; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX
 OS Synthetic.
 OS
 XX WO2003072590-A1.
 XX
 FN 04-SEP-2003.
 XX
 PD 28-JAN-2003; 2003WO-US002510.
 XX
 PF 20-FEB-2002; 2002US-0358580P.
 XX
 XX 11-MAR-2002; 2002US-0363124P.
 PR
 XX 06-JUN-2002; 2002US-0386782P.
 PR
 XX 29-AUG-2002; 2002US-0406784P.
 PR
 XX 05-SEP-2002; 2002US-0408378P.
 PR
 XX 09-SEP-2002; 2002US-0409293P.
 PR
 XX 15-JAN-2003; 2003US-0440129P.
 XX
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 PA
 XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
 PI
 XX WPI; 2003-689980/65.
 DR
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of mitogen-activated
 PT protein kinase genes.
 XX
 PS Example 3; SEQ ID NO 205; 164pp; English.
 XX

CC The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of a mitogen-activated protein kinase
 CC (MAPK) genes by RNA interference. Also described: (1) a method for
 CC modulating expression of MAPK genes in cells, tissue explants or
 CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
 CC vectors that express siNA and cells containing these vectors. MAPK siNAs
 CC have cytostatic, anorectic, antidiabetic, antiinflammatory,
 CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
 CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
 CC siNAs can be used to modulate the expression of MAPK genes, in cells,
 CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
 CC and II; a wide range of tumours, and inflammatory diseases (asthma,
 CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
 CC disease). They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents a MAPK siNA which is used
 CC in the exemplification of the present invention.

XX Sequence 19 BP; 7 A; 6 C; 6 G; 0 T; 0 U; 0 Other;
 SQ

Query Match 0.9%; Score 15.4; DB 1; Length 19;
 Best Local Similarity 94.1%; Pred. No. 5.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1035 CTTTGGCCTGGCCCGAG 1051
 Db 19 CTTTGGCCTGGCCCGTG 3
 |||||:|||||
 |||||:|||||

RESULT 287
 ADE29420
 ID ADE29420 standard; RNA; 19 BP.
 XX
 AC ADE29420;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:42.
 XX
 KW short interfering nucleic acid; siNA; downregulation; inhibition;
 KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
 KW cytostatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
 KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
 KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
 KW psoriasis; inflammatory bowel disease; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX
 OS Synthetic.
 XX
 PN WO2003072590-A1.
 XX
 PD 04-SEP-2003.
 XX
 PF 28-JAN-2003; 2003WO-US002510.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 03-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (SIRN-) SIRNA THERAPEUTICS INC.
 XX
 PI Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
 XX WPI; 2003-689980/65.
 XX
 DR New short interfering nucleic acid, useful e.g. for treatment and
 XX PT

PT diagnosis of cancer, downregulates expression of mitogen-activated
 PT protein kinase genes.
 XX
 PS Example 3; SEQ ID NO 42; 164pp; English.
 XX
 CC The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of a mitogen-activated protein kinase
 CC (MAPK) genes by RNA interference. Also described: (1) a method for
 CC modulating expression of MAPK genes in cells, tissue explants or
 CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
 CC vectors that express siNA and cells containing these vectors. MAPK siNAs
 CC have cytostatic, anorectic, antidiabetic, antiinflammatory,
 CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
 CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
 CC siNAs can be used to modulate the expression of MAPK genes, in cells,
 CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
 CC and II; a wide range of tumours, and inflammatory diseases (asthma,
 CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
 CC disease). They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents a MAPK siNA which is used
 CC in the exemplification of the present invention.

XX Sequence 19 BP; 0 A; 6 C; 6 G; 0 T; 7 U; 0 Other;
 SQ

Query Match 0.9%; Score 15.4; DB 1; Length 19;
 Best Local Similarity 70.6%; Pred. No. 5.1e+02;
 Matches 12; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1035 CTTTGGCCTGGCCCGAG 1051
 Db 1 CUUUGCCUGGCCGUG 17
 |||||:|||||
 |||||:|||||

RESULT 288
 ADF85010
 ID ADF85010 standard; RNA; 19 BP.
 XX
 AC ADF85010;
 XX
 DT 26-FEB-2004 (first entry)
 XX
 DE Human ERG2-targeted siRNA - SEQ ID 1304.
 XX
 KW short interfering nucleic acid; siNA; breakpoint cluster region;
 KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
 KW cytostatic; leukaemia; lymphoma; human; ss; siRNA; ERG2;
 KW v-ets erythroblastosis virus E26 oncogene like (avian).
 XX
 OS Homo sapiens.
 XX
 PN WO2003070972-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 20-FEB-2003; 2003WO-US005234.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 15-AUG-2002; 2002US-0404039P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 03-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 14-JAN-2003; 2003US-0439922P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen J, Beigelman L, Chowrira B;
 XX

DR WPI; 2003-679889/64.
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint
PT cluster region-Abelson (BCR-ABL) gene.
XX
XX Example 7; SEQ ID NO 1304; 197pp; English.
XX
XX The invention relates to a novel double-stranded short interfering
CC nucleic acid (siRNA) that downregulates expression of the breakpoint
CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
CC activity and may be useful for modulating expression of the BCR-ABL gene,
CC as well as for treating leukaemia or lymphoma and in diagnosis, drug
CC screening, target identification and validation, genetic engineering,
CC gene function studies and gene mapping. The current sequence is that of
CC the human ERG2 (v-ets erythroblastosis virus E26 oncogene like (avian))-
CC targeted siRNA of the invention.
XX
SQ Sequence 19 BP; 6 A; 5 C; 6 G; 0 T; 2 U; 0 Other;
Query Match 0.9%; Score 15.4; DB 1; Length 19;
Best Local Similarity 82.4%; Pred. No. 5.1e+02;
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 1295 CCACGCGGAGTTCAAG 1311
Db 3 CCACGCGGAGUUCAG 19
RESULT 289
ADF85186/c
ID ADF85186 standard; RNA; 19 BP.
XX
XX ADF85186;
XX
XX 26-FEB-2004 (first entry)
XX
XX Human ERG2-targeted siRNA - SEQ ID 1480.
XX
XX short interfering nucleic acid; siRNA; breakpoint cluster region;
KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW cytostatic; leukaemia; lymphoma; human; ss; siRNA; ERG2;
KW v-ets erythroblastosis virus E26 oncogene like (avian).
XX
XX Homo sapiens.
XX
XX WO2003070972-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005234.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 15-AUG-2002; 2002US-0404039P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 14-JAN-2003; 2003US-0439922P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Chowrira B;
PI WPI; 2003-679889/64.
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint
PT cluster region-Abelson (BCR-ABL) gene.
XX

PS Example 7; SEQ ID NO 1480; 197pp; English.
XX
XX The invention relates to a novel double-stranded short interfering
CC nucleic acid (siRNA) that downregulates expression of the breakpoint
CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
CC activity and may be useful for modulating expression of the BCR-ABL gene,
CC as well as for treating leukaemia or lymphoma and in diagnosis, drug
CC screening, target identification and validation, genetic engineering,
CC gene function studies and gene mapping. The current sequence is that of
CC the human ERG2 (v-ets erythroblastosis virus E26 oncogene like (avian))-
CC targeted siRNA of the invention.
XX
SQ Sequence 19 BP; 2 A; 6 C; 5 G; 0 T; 6 U; 0 Other;
Query Match 0.9%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 5.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1295 CCACGCGGAGTTCAAG 1311
Db 17 CCACGCGGAGTTCAAG 1
RESULT 290
AD015041/c
ID AD015041 standard; RNA; 19 BP.
XX
XX AD015041;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human PDGFR-targeted siRNA lower strand SEQ ID NO:472.
XX
XX cytostatic; vasotropic; nephrotropic; cerebroprotective;
KW treating leukaemia; solid tumors; restenosis; polycystic kidney disease;
KW bronchiolitis; glomerulonephritis; stroke; RNA interference;
KW short interfering nucleic acid; siRNA; short interfering RNA; siRNA;
KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
KW expression modulation; gene therapy; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; human;
KW platelet derived growth factor receptor; PDGFR; ss.
XX
XX Homo sapiens.
XX
XX WO2003072704-A2.
XX
XX 04-SEP-2003.
XX
XX 05-FEB-2003; 2003WO-US003473.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Chowrira B;
PI WPI; 2003-731605/69.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of tumors, downregulates expression of the platelet-derived
PT growth factor receptor gene.
XX
XX Example 3; SEQ ID NO 472; 148pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which

CC downregulate expression of the human platelet-derived growth factor
 CC receptor (PDGFR) gene by RNA interference. The siRNAs may or may not
 CC comprise ribonucleotides and may be double or single stranded. They
 CC further comprise sense and antisense regions, or alternatively are
 CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
 CC Specifically, the siRNAs include short interfering RNA (siRNA, double-
 CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siRNAs
 CC can be unmodified or chemically modified, can contain
 CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
 CC vector or enzymatically synthesised. The invention also relates to kits
 CC for the in vitro or in vivo delivery of siRNA; conjugates and/or
 CC complexes of siRNA; and vectors that express siRNA. The siRNAs are used to
 CC modulate expression of the PDGFR gene in cells, tissue explants or
 CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
 CC for the treatment of a variety of conditions. They may be used for
 CC treating leukaemia and solid tumours, restenosis, polycystic kidney
 CC disease, bronchiolitis, glomerulonephritis and stroke. The siRNAs are also
 CC useful for drug screening, diagnosis, therapeutic target identification
 CC and validation, genetic engineering, pharmacogenomics, studying gene
 CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
 CC The present sequence represents the lower strand of a human PDGFR-
 CC targeted double-stranded siRNA, which is identical to the PDGFR transcript
 CC target sequence.

XX
 SQ Sequence 19 BP; 7 A; 6 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 19;
 Best Local Similarity 94.1%; Pred. No. 5.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1032 TGACTTTGGCTGGCCC 1048
 DB 17 TGACTTTGGCTGGCTC 1

RESULT 291
 AD014730
 ID AD014730 standard; RNA; 19 BP.

XX AC AD014730;

XX 01-JUL-2004 (first entry)

DE Human PDGFR-targeted siRNA upper strand SEQ ID NO:161.

XX cytostatic; vasotropic; nephrotropic; cerebroprotective;
 KW treating leukaemia; solid tumors; restenosis; polycystic kidney disease;
 KW bronchiolitis; glomerulonephritis; stroke; RNA interference;
 KW short interfering nucleic acid; siRNA; short interfering RNA; siRNA;
 KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
 KW expression modulation; gene therapy; drug screening; diagnosis;
 KW therapeutic target identification; pharmacogenomics;
 KW gene function analysis; gene mapping; human;
 KW platelet derived growth factor receptor; PDGFR; ss.

XX Homo sapiens.

XX WO2003072704-A2.

XX 04-SEP-2003.

XX 05-FEB-2003; 2003WO-US003473.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

PI Mcswiggen J, Beigelman L, Chowrira B;
 XX WPI; 2003-731605/69.

XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of tumors, downregulates expression of the platelet-derived
 PT growth factor receptor gene.

XX Example 3; SEQ ID NO 161; 148pp; English.

XX The invention relates to short interfering nucleic acids (siRNA) which
 CC downregulate expression of the human platelet-derived growth factor
 CC receptor (PDGFR) gene by RNA interference. The siRNAs may or may not
 CC comprise ribonucleotides and may be double or single stranded. They
 CC further comprise sense and antisense regions, or alternatively are
 CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
 CC Specifically, the siRNAs include short interfering RNA (siRNA, double-
 CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siRNAs
 CC can be unmodified or chemically modified, can contain
 CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
 CC vector or enzymatically synthesised. The invention also relates to kits
 CC for the in vitro or in vivo delivery of siRNA; conjugates and/or
 CC complexes of siRNA; and vectors that express siRNA. The siRNAs are used to
 CC modulate expression of the PDGFR gene in cells, tissue explants or
 CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
 CC for the treatment of a variety of conditions. They may be used for
 CC treating leukaemia and solid tumors, restenosis, polycystic kidney
 CC disease, bronchiolitis, glomerulonephritis and stroke. The siRNAs are also
 CC useful for drug screening, diagnosis, therapeutic target identification
 CC and validation, genetic engineering, pharmacogenomics, studying gene
 CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
 CC The present sequence represents the upper strand of a human PDGFR-
 CC targeted double-stranded siRNA, which is identical to the PDGFR transcript
 CC target sequence.

SQ Sequence 19 BP; 1 A; 5 C; 6 G; 0 T; 7 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 19;
 Best Local Similarity 64.7%; Pred. No. 5.1e+02;
 Matches 11; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

QY 1032 TGACTTTGGCTGGCCC 1048
 DB 3 UGACUUGGCCUGGCU 19

RESULT 292

AAZ18214

ID AAZ18214 standard; DNA; 20 BP.

XX AC AAZ18214;

XX 11-OCT-1999 (first entry)

XX Tyrosine kinase gene specific primer 405.

XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9934016-A2.

XX 08-JUL-1999.

XX 28-DEC-1998; 98WO-IL000625.

XX 29-DEC-1997; 97IL-00122793.

XX 16-OCT-1998; 98IL-00126627.

(GENE-) GENENA LTD.
 Vider B;
 WPI; 1999-419113/35.
 P-PSDB; AAY14748.
 Identifying and characterizing cells by comparing the pattern of gene expression in a selected gene family.
 Claim 4; Page 48; 102pp; English.
 The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell the pattern of expression of genes in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is transformed. They can be used for detecting a selected genetic defect in an individual, e.g. a fetus. They can also be used for determining the effect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected gene family. Sequences AA217803-218342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, protein phosphatase genes, P450 enzyme genes, steroid receptor superfamily genes or cadherin superfamily genes
 Sequence 20 BP; 3 A; 2 C; 7 G; 8 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 5.3e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1024 AAGCTGGCTGACTTTGG 1040
 Db 1 AAGGTGGCTGACTTTGG 17
 RESULT 293
 ACF03629/G
 ID ACF03629 standard; DNA; 20 BP.
 XX AC ACF03629;
 XX 15-SEP-2003 (first entry)
 XX Human NOV4b reverse PCR primer SEQ ID NO:199.
 XX Human; NOVX; cytostatic; cardiant; antiinflammatory; immunosuppressive;
 KW allergic; haemostatic; anti-HIV; antidiabetic; antiarteriosclerotic;
 KW anorectic; antiaesthetic; nephrotropic; antiarthritic; hepatotropic;
 KW neuroprotective; nootropic; antibacterial; virucide; antiparasitic;
 KW relaxant; anticonvulsant; hypotensive; vasotropic; antiparkinsonian;
 KW vulnery; angiogenic; antiangiogenic; gene therapy; vaccine; cancer;
 KW cardiomyopathy; atherosclerosis; hypertension; diabetes; inflammation;
 KW autoimmune disorder; allergy; blood disorder; AIDS; obesity; asthma;
 KW acquired immunodeficiency syndrome; nephropathy; cirrhosis; arthritis;
 KW Alzheimer's disease; Parkinson's disease; goitre; infection; stroke;
 KW muscular dystrophy; epilepsy; wasting disorder; PCR primer; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200294870-A2.
 XX 28-NOV-2002.
 PD
 XX 02-NOV-2001; 2001WO-US051580.

XX 02-NOV-2000; 2000US-0245291P.
 PR 02-NOV-2000; 2000US-0245317P.
 PR 07-NOV-2000; 2000US-0246562P.
 PR 08-NOV-2000; 2000US-0246871P.
 PR 26-JAN-2001; 2001US-0264389P.
 PR 26-JAN-2001; 2001US-0264423P.
 PR 29-JAN-2001; 2001US-0264799P.
 XX (CURA-) CURAGEN CORP.
 PA
 XX Grosse WM, Macdougall JR, Smithson G, Millet I, Stone DJ;
 PI Gunther E, Ellerman K, Alsobrook JP, Lepley DM, Burgess CE;
 PI Spytek KA, Edinger SR, Gangolli EA, Gorman L, Taupier RJ, Li L;
 PI Guo X, Fernandes ER, Vernet CAM, Tchernev VT, Casman SJ, Shenoy S;
 PI Mishra V, Furtak K, Baumgartner JC, Colman SD;
 XX WPI; 2003-140359/13.
 DR
 XX New NOVX polypeptide useful for preventing or treating NOVX-associated
 PT disorders, e.g. cancer, cardiomyopathy, atherosclerosis or diabetes, and
 PT in chromosome mapping, tissue typing or pharmacogenomics.
 XX
 XX Example 2; Page 293; 346pp; English.
 PS
 CC ACF03547 to ACF03570 encode the human NOVX proteins (I) given in ABR57412
 CC to ABR57435. (I) have cytostatic, cardiant, antiinflammatory, nootropic,
 CC immunosuppressive, antiallergic, haemostatic, anti-HIV, antidiabetic,
 CC antiarteriosclerotic, anorectic, antiaesthetic, nephrotropic, virucide,
 CC antiarthritic, hepatotropic, neuroprotective, antibacterial, relaxant,
 CC antiparasitic, anticonvulsant, hypotensive, vasotropic, antiparkinsonian,
 CC vulnery, angiogenic and antiangiogenic activities, and can be used in
 CC gene therapy and vaccines. The NOVX polypeptides and their antibodies can
 CC be used to determine the presence or absence of (I) in a sample. The NOVX
 CC polypeptides, polynucleotides encoding them, and antibodies against them,
 CC are useful in manufacturing a medicament for treating or preventing a
 CC syndrome associated with a NOVX-associated disorder such as hypertension,
 CC cardiomyopathy, atherosclerosis, cancer, diabetes, asthma, inflammation,
 CC autoimmune disorders, allergies, blood disorders, obesity, acquired
 CC immunodeficiency syndrome (AIDS), immunoglobulin (Ig)A nephropathy,
 CC cirrhosis, arthritis, Alzheimer's disease, Parkinson's disease, goitre,
 CC infections (e.g. bacterial, viral, parasitic), stroke, muscular
 CC dystrophy, epilepsy, and other wasting disorders associated with chronic
 CC diseases. ACF03571 to ACF03644 represent PCR primers and probes for NOVX
 CC diseases, which are used in an example from the present invention
 XX
 XX Sequence 20 BP; 9 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
 XX
 Query Match 0.9%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 5.3e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1240 TTCATCTTCCGATCTT 1256
 Db 18 TTCATCTTCCGATCTT 2
 RESULT 294
 AAL62434/c
 ID AAL62434 standard; DNA; 20 BP.
 XX
 AC AAL62434;
 XX
 DT 06-OCT-2003 (first entry)
 XX
 XX Human ABC transporter MHC I antisense oligonucleotide, ISIS 206615.
 DE
 XX
 KW ABC transporter; ABCT; major histocompatibility complex; MHC; cytostatic;
 KW hyperproliferative; autoimmune disorder; antisense gene therapy;
 KW inflammation; tumour formation; immunosuppressive; antimicrobial; human;
 KW phosphorothioate backbone; antisense; ss.
 XX
 OS Homo sapiens.


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XX DE Human gene expression analysis multiplex Start-PCR primer #229.
XX KW Gene expression; multiplex standardised reverse transcriptase-PCR;
XX KW Start-PCR; high density oligonucleotide array; cDNA array;
XX KW small biological sample; fine needle aspirate biopsy;
XX KW laser captured microdissected material; human; primer; ss.
XX OS Homo sapiens.
XX PN US2003186246-A1.
XX PD 02-OCT-2003.
XX PF 28-MAR-2002; 2002US-00109349.
XX PR 28-MAR-2002; 2002US-00109349.
XX XX (WILL/ WILLEY J C.
XX PA (CRAW/ CRAWFORD E L.
XX PI Willey JC, Crawford EL;
XX DR WPI; 2003-811730/76.
XX XX
XX PT Direct comparison of numerical gene expression values between samples of
XX PT genes comprises using multiplex standardized reverse transcription-
XX PT polymerase chain reaction.
XX XX
XX PS Example 1; SEQ ID NO 229; 59pp; English.
XX CC
XX CC The present invention relates to a method for the direct comparison of
XX CC numerical gene expression values between samples of genes. The method
XX CC comprises amplifying cDNA in the presence of a competitive template
XX CC mixture and primer pairs for several genes and then amplifying aliquots
XX CC of the PCR products using a primer pair specific for each gene. The
XX CC method of amplification is by multiplex standardised reverse
XX CC transcriptase-polymerase chain reaction (Start-PCR). High density
XX CC oligonucleotide or cDNA arrays are used to measure PCR products following
XX CC quantitative Start-PCR. The method is useful for the assessment of gene
XX CC expression in small biological samples such as fine needle aspirate
XX CC biopsies, and laser captured microdissected materials. The method allows
XX CC for the standardised measurement of hundreds of genes from the same
XX CC sample, which in prior art, could only be assessed for one gene. The
XX CC present sequence represents a multiplex Start-PCR primer which can be
XX CC used in the method of the present invention.
XX XX
XX SQ Sequence 20 BP; 0 A; 10 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 825 GTCCCTCACCTTGCTCT 841
Db 4 GTCCCTCCCCCTTGCTCT 20

RESULT 297
ADF72079
ID ADF72079 standard; DNA; 20 BP.
AC ADF72079;
XX XX
XX DT 12-FEB-2004 (first entry)
XX XX
XX DE Human p21 gene PCR primer SEQ ID NO:46.
XX XX proliferation; cancer; cancer cell growth inhibition; human; PCR primer;
XX KW ss.
XX KW Synthetic.
XX OS Homo sapiens.

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XX PN WO2003082078-A2.
XX XX
XX PD 09-OCT-2003.
XX XX
XX PF 27-MAR-2003; 2003WO-US009428.
XX XX
XX PR 28-MAR-2002; 2002US-0368288P.
XX PR 28-MAR-2002; 2002US-0368409P.
XX XX
XX PA (MEDI-) MEDICAL COLLEGE OHIO.
XX XX
XX PI Willey JC, Weaver DA, Warner KA, Graves TG, Demuth JP;
XX PI Crawford EL;
XX XX
XX DR WPI; 2003-902899/82.
XX XX
XX PT Determining whether an agent can be used to reduce the proliferation,
XX PT cause the death or inhibit the growth of cancer cell population by
XX PT obtaining a sample of cancer cells and quantifying the level of
XX PT expression of a marker in the cells.
XX XX
XX PS Disclosure; SEQ ID NO 46; 106pp; English.
XX XX
XX CC The present invention describes a method for determining whether an agent
XX CC can be used to reduce the proliferation and/or cause the death of cancer
XX CC cells or inhibit the growth of a cancer cell population. The method is
XX CC useful in determining whether an agent can be used to reduce the
XX CC proliferation and/or cause the death of cancer cells or inhibit the
XX CC growth of a cancer cell population. The present sequence represents a PCR
XX CC primer which is used in the exemplification of the present invention.
XX XX
XX SQ Sequence 20 BP; 0 A; 10 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 825 GTCCCTCACCTTGCTCT 841
Db 4 GTCCCTCCCCCTTGCTCT 20

RESULT 298
ADH17728/c
ID ADH17728 standard; DNA; 20 BP.
XX XX
XX AC ADH17728;
XX XX
XX DT 11-MAR-2004 (first entry)
XX XX
XX DE Forward PCR primer Ag2822 used to analyse human NOV expression.
XX XX
XX KW NOVX; antidiabetic; anorectic; cardiac; hypotensive;
XX KW antiatherosclerotic; anorectic; virucide; antibacterial; fungicide;
XX KW protozoacide; neurotropic; neuroprotective; antiparkinsonian;
XX KW anticonvulsant; osteopathic; antiarthritic; antiinflammatory;
XX KW dermatological; antiasthmatic; antilipemic; metabolic; diabetes;
XX KW obesity; infection; anorexia; cancer; cardiovascular; hypertension;
XX KW atherosclerosis; neurodegenerative; Alzheimer's disease; Parkinson's;
XX KW epilepsy; immune; osteoarthritis; haemopoietic;
XX KW inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis;
XX KW cell differentiation; proliferation; haemopoiesis; wound healing;
XX KW angiogenesis; gene therapy; chromosome mapping; tissue typing;
XX KW pharmacogenomic; human; PCR; primer; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO2003093432-A2.
XX XX
XX PD 13-NOV-2003.
XX XX
XX PF 02-MAY-2003; 2003WO-US013690.

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XX PR 02-MAY-2002; 2002US-0377321P.
PR 08-MAY-2002; 2002US-0378730P.
PR 24-MAY-2002; 2002US-0383075P.
PR 29-MAY-2002; 2002US-0384044P.
PR 30-MAY-2002; 2002US-0384215P.
PR 30-MAY-2002; 2002US-0384296P.
PR 30-MAY-2002; 2002US-0384297P.
PR 30-MAY-2002; 2002US-0384327P.
PR 30-MAY-2002; 2002US-0384352P.
PR 31-MAY-2002; 2002US-0385211P.
PR 02-JUL-2002; 2002US-0393333P.
PR 09-AUG-2002; 2002US-0402154P.
PR 09-AUG-2002; 2002US-0402171P.
PR 09-AUG-2002; 2002US-0402204P.
PR 09-AUG-2002; 2002US-0402205P.
PR 22-AUG-2002; 2002US-0405175P.
PR 27-AUG-2002; 2002US-0406129P.
PR 23-SEP-2002; 2002US-0412954P.
PR 30-SEP-2002; 2002US-0414975P.
PR 07-OCT-2002; 2002US-0416661P.
PR 24-OCT-2002; 2002US-0420851P.
PR 31-OCT-2002; 2002US-0422547P.
PR 01-MAY-2003; 2003US-00428275.
XX PA (CURA-) CURAGEN CORP.
XX PI Alvarez E, Anderson DW, Boldog FL, Catterton E, Edinger SR;
PI Fernandes ER, Gerlach VL, Gorman L, Grosse WM, Guo X, Ji W;
PI Kekuda R, Li L, Macdougall JR, Padigaru M, Patturajan M;
PI Peterson JD, Rastelli L, Shinkets RA, Spytek KA, Stone DJ;
PI Vernet CAM, Voss EZ, Zhong M;
XX PR WPI; 2004-053040/05.
XX PR New isolated NOVX polypeptide, useful for preventing, diagnosing or
PT treating NOVX-associated disorders, e.g. osteoarthritis, obesity,
PT atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
XX PS Example C; SEQ ID NO 418; 478pp; English.
XX CC The invention relates to a novel isolated NOVX polypeptide. The
CC polypeptide of the invention demonstrates antidiabetic, anorectic,
CC cardiant, hypotensive, antiarteriosclerotic, anorectic, virucide,
CC antibacterial, fungicide, protozoacide, nootropic, neuroprotective,
CC antiparkinsonian, anticonvulsant, osteopathic, antiarthritic,
CC antiinflammatory, dermatological, antiasthmatic and antilipaemic
CC activities. The polypeptides, nucleic acid molecules and antibodies may
CC be useful in the manufacture of a medicament for treating metabolic
CC disorders, diabetes, obesity, infectious diseases (viral, bacterial,
CC fungal, helminthic, and protozoal), anorexia, cancer, cardiovascular
CC diseases including hypertension and atherosclerosis, neurodegenerative
CC disorders, Alzheimer's disease, Parkinson's disease, epilepsy, immune
CC disorders such as osteoarthritis, haemopoietic disorders, inflammatory
CC skin disorders, asthma and various types of dyslipidaemia. The nucleic
CC acids and polypeptides may also be used as targets for the identification
CC of small molecules that modulate or inhibit neurogenesis, cell
CC differentiation, cell proliferation, haemopoiesis, wound healing and
CC angiogenesis, in gene therapy and the in generation of antibodies that
CC bind immunospecifically to NOVX substances for use in therapeutic or
CC diagnostic methods. The nucleic acids may be further used as
CC hybridisation probes, in chromosome mapping, tissue typing, preventive
CC medicine and pharmacogenomics. The current sequence is that of the human
CC NOVX-related PCR primer which was used in the exemplification of the
XX CC invention.
XX SQ Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 865 AAGCAGTACCTGGATGA 881
```

```
Db 20 AAGCAGGACCTGGATGA 4
||||| ||||| |||||
RESULT 299
ADH45076/c
ID ADH45076 standard; DNA; 20 BP.
XX ADH45076;
AC ADH45076;
XX 25-MAR-2004 (first entry)
XX Human beta-site APP-cleaving enzyme 2, antisense oligonucleotide #10.
XX Antisense therapy; human; beta-site APP-cleaving enzyme 2;
KW hyperproliferative disorder; cancer; neurodegenerative disorder;
KW Alzheimer's disease; cytostatic; neuroprotective; nootropic;
KW phosphorothioate; ss.
OS Homo sapiens.
XX Key Location/Qualifiers
FT modified_base 1..20
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX US2003224517-A1.
XX 04-DEC-2003.
XX 04-JUN-2002; 2002US-00163272.
XX 04-JUN-2002; 2002US-00163272.
XX (ISIS-) ISIS PHARM INC.
XX Dobie KW;
XX WPI; 2004-022081/02.
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding beta-site APP-cleaving enzyme 2 useful for treating
PT a disease or condition, e.g. cancer, Alzheimer's disease or
PT neurodegenerative disease.
XX Example 15; SEQ ID NO 20; 59pp; English.
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding beta-site APP-cleaving enzyme 2. The antisense
XX compound comprises an antisense oligonucleotide that specifically
XX hybridises with the nucleic acid and inhibits the expression of beta-site
XX APP-cleaving enzyme 2. The antisense oligonucleotide is a chimeric
XX oligonucleotide. The antisense oligonucleotide comprises at least one
XX modified internucleoside linkage, preferably a phosphorothioate linkage.
XX It also comprises at least one modified sugar moiety, preferably a 2'-O-
XX methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further
XX comprises at least one modified nucleobase, preferably a 5-
XX methylcytosine. The antisense oligonucleotides are useful for the
XX treatment of diseases such as hyperproliferative disorders, e.g. cancer,
XX and neurodegenerative disorders such as Alzheimer's disease. The present
XX sequence represents an antisense oligonucleotide used in the examples of
XX the present invention.
XX SQ Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

Qy 510 CTACCTGGAGAGCTGA 526
|||||
Db 18 CTACCTGGAGATGCTGA 2

RESULT 300
ADH45153
ID ADH45153 standard; DNA; 20 BP.
XX
AC ADH45153;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human beta-site APP-cleaving enzyme 2 DNA target sequence #9.
XX
KW Antisense therapy; human; beta-site APP-cleaving enzyme 2;
XX hyperproliferative disorder; cancer; neurodegenerative disorder;
KW Alzheimer's disease; cytostatic; neuroprotective; nootropic; ds.
XX
OS Homo sapiens.
XX
PN US2003224517-A1.
XX
PD 04-DEC-2003.
XX
PF 04-JUN-2002; 2002US-00163272.
XX
PR 04-JUN-2002; 2002US-00163272.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW;
XX
DR WPI; 2004-022081/02.
XX
PS New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding beta-site APP-cleaving enzyme 2 useful for treating
CC a disease or condition, e.g. cancer, Alzheimer's disease or
CC neurodegenerative disease.
CC
CC Example 15; SEQ ID NO 97; 59pp; English.
CC
CC The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding beta-site APP-cleaving enzyme 2. The antisense
CC compound comprises an antisense oligonucleotide that specifically
CC hybridises with the nucleic acid and inhibits the expression of beta-site
CC APP-cleaving enzyme 2. The antisense oligonucleotide is a chimeric
CC oligonucleotide. The antisense oligonucleotide comprises at least one
CC modified internucleoside linkage, preferably a phosphorothioate linkage.
CC It also comprises at least one modified sugar moiety, preferably a 2'-O-
CC methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further
CC comprises at least one modified nucleobase, preferably a 5-
CC methylcytosine. The antisense oligonucleotides are useful for the
CC treatment of diseases such as hyperproliferative disorders, e.g. cancer,
CC and neurodegenerative disorders such as Alzheimer's disease. The present
CC sequence represents a human beta-site APP-cleaving enzyme 2 DNA target
CC sequence for an antisense oligonucleotide.
XX
SQ Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 510 CTACCTGGAGAGCTGA 526
|||||
Db 3 CTACCTGGAGATGCTGA 19

RESULT 301
ADI28116/C
ID ADI28116 standard; DNA; 20 BP.
XX

AC ADI28116;
XX
DT 22-APR-2004 (first entry)
XX
DE Antisense oligonucleotide targeting human PRL3 ISIS 217398.
XX
KW Human; antisense gene therapy; ss; PRL3;
KW protein tyrosine phosphatase type IVA member 3; colorectal cancer;
KW diabetes; glucose tolerance; insulin resistance; obesity;
KW hyperproliferative disorder; cytostatic.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone and all cytidines are 5
FT -methyl cytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
XX
PN US2003235911-A1.
XX
PD 25-DEC-2003.
XX
PF 20-JUN-2002; 2002US-00177554.
XX
PR 20-JUN-2002; 2002US-00177554.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW, Zhang H;
XX
DR WPI; 2004-070585/07.
XX
PS New antisense oligonucleotide, comprising a sequence targeted to a
XX nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL
XX -3), useful for preparing a composition for treating hyperproliferative
XX disorders, e.g., cancer.
XX
XX Example 15; SEQ ID NO 23; 77pp; English.
XX
XX The invention relates to a compound comprising a sequence comprising 8-80
XX base pairs (bp) targeted to a nucleic acid encoding protein tyrosine
XX phosphatase type IVA member 3 (PRL-3), that specifically hybridises with
XX the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is
XX an antisense oligonucleotide (AO). Also included are a composition
XX comprising the compound and a carrier or diluent, inhibiting the
XX expression of PRL-3 in cells or tissues, treating an animal having or
XX suspected of having a disease or condition associated with PRL-3 and
XX screening for an antisense compound. The antisense oligonucleotide is
XX useful for preparing a composition for treating hyperproliferative
XX disorder, particularly cancer (e.g. colorectal cancer), diabetes,
XX reduced glucose tolerance, insulin resistance and obesity. The present
XX sequence is an antisense oligonucleotide targeting human PRL3.
XX
SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 857 AGGACCTGAAGCAGTAC 873
|||||
Db 19 AGGACCTGAAGAGTAC 3

```
RESULT 302
ADI28258
ID ADI28258 standard; cDNA; 20 BP.
XX
AC ADI28258;
XX
DT 22-APR-2004 (first entry)
XX
DE Human PRL3 antisense target region #2.
XX
KW Human; antisense gene therapy; ss; PRL3;
KW protein tyrosine phosphatase type IVA member 3; colorectal cancer;
KW diabetes; glucose tolerance; insulin resistance; obesity;
KW hyperproliferative disorder; cytostatic.
XX
OS Homo sapiens.
XX
PN US2003235911-A1.
XX
PD 25-DEC-2003.
XX
PF 20-JUN-2002; 2002US-00177554.
XX
PR 20-JUN-2002; 2002US-00177554.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW, Zhang H;
XX
DR WPI; 2004-070585/07.
XX
PT New antisense oligonucleotide, comprising a sequence targeted to a
PT nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL
PT -3), useful for preparing a composition for treating hyperproliferative
PT disorders, e.g., cancer.
XX
PS Example 16; SEQ ID NO 165; 77pp; English.
XX
CC The invention relates to a compound comprising a sequence comprising 8-80
CC base pairs (bp) targeted to a nucleic acid encoding protein tyrosine
CC phosphatase type IVA member 3 (PRL-3), that specifically hybridises with
CC the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is
CC an antisense oligonucleotide (AO). Also included are a composition
CC comprising the compound and a carrier or diluent, inhibiting the
CC expression of PRL-3 in cells or tissues, treating an animal having or
CC suspected of having a disease or condition associated with PRL-3 and
CC screening for an antisense compound. The antisense oligonucleotide is
CC useful for preparing a composition for treating hyperproliferative
CC disorder, particularly cancer (e.g. colorectal cancer), diabetes,
CC reduced glucose tolerance, insulin resistance and obesity. The present
CC sequence is a Human PRL3 cDNA AO target region.
XX
SQ Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 857 AGGACCTGAAGCAGTAC 873
Db 2 AGGACCTGAAGAGTAC 18
XX
RESULT 303
ADI29170
ID ADI29170 standard; cDNA; 20 BP.
XX
AC ADI29170;
XX
DT 22-APR-2004 (first entry)
XX
DE Human MARK3 cDNA target region #3.
XX
Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 971 TACACCGAGACCTCAAG 987
Db 4 TACATCGAGACCTCAAG 20
XX
RESULT 304
ADI29100/c
ID ADI29100 standard; DNA; 20 BP.
XX
AC ADI29100;
XX
DT 22-APR-2004 (first entry)
XX
DE Antisense oligonucleotide targeting human MARK3 ISIS 151469.
XX
KW Human; antisense gene therapy; ss; MARK3;
KW MAP/microtubule affinity-regulating kinase 3; cancer;
KW Alzheimer's disease; neurodegenerative disorder;
KW hyperproliferative disorder; cytostatic.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT FT /mod_base= OTHER
```

```
XX
KW Human; antisense gene therapy; ss; MARK3;
KW MAP/microtubule affinity-regulating kinase 3; cancer;
KW Alzheimer's disease; neurodegenerative disorder;
KW hyperproliferative disorder; cytostatic.
XX
OS Homo sapiens.
XX
PN US2003232771-A1.
XX
PD 18-DEC-2003.
XX
PF 17-JUN-2002; 2002US-00174319.
XX
PR 17-JUN-2002; 2002US-00174319.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Ward DT, Freier SM, Dobie KW;
XX
DR WPI; 2004-052188/05.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT microtubule-affinity-regulating kinases (MARK3), useful for modulating
PT expression of MARK3 or for treating cancer or Alzheimer's disease.
XX
PS Example 15; SEQ ID NO 90; 233pp; English.
XX
CC The invention relates to a compound comprising a sequence comprising 8-80
CC base pairs (bp) targeted to a nucleic acid encoding MARK3
CC (MAP/microtubule affinity-regulating kinase 3), that specifically
CC hybridises with the nucleic acid encoding MARK3 and inhibits expression
CC of MARK3, i.e. is an antisense oligonucleotide (AO). Also included are a
CC composition comprising the compound and a carrier or diluent, inhibiting
CC the expression of MARK3 in cells or tissues, treating an animal having or
CC suspected of having a disease or condition associated with MARK3 and
CC screening for an antisense compound. The antisense oligonucleotide is
CC useful for preparing a composition for treating hyperproliferative
CC disorder, particularly cancer and neurodegenerative diseases e.g.
CC Alzheimer's disease. The present sequence is a MARK3 cDNA target region.
XX
SQ Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 971 TACACCGAGACCTCAAG 987
Db 4 TACATCGAGACCTCAAG 20
XX
RESULT 304
ADI29100/c
ID ADI29100 standard; DNA; 20 BP.
XX
AC ADI29100;
XX
DT 22-APR-2004 (first entry)
XX
DE Antisense oligonucleotide targeting human MARK3 ISIS 151469.
XX
KW Human; antisense gene therapy; ss; MARK3;
KW MAP/microtubule affinity-regulating kinase 3; cancer;
KW Alzheimer's disease; neurodegenerative disorder;
KW hyperproliferative disorder; cytostatic.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT FT /mod_base= OTHER
```

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FT FT /note= "Phosphorothioate backbone and all cytidines are 5
FT FT -methyl cytidines"
FT FT modified_base 1..5
FT FT /tag= a
FT FT /mod_base= OTHER
FT FT /note= "2'-methoxyethyl residues"
FT FT modified_base 16..20
FT FT /tag= c
FT FT /mod_base= OTHER
FT FT /note= "2'-methoxyethyl residues"
XX US2003232771-A1.
FW 18-DEC-2003.
XX
XX 17-JUN-2002; 2002US-00174319.
XX
XX 17-JUN-2002; 2002US-00174319.
XX (ISIS-) ISIS PHARM INC.
XX
XX Ward DT, Freier SM, Dobie KW;
XX WPI; 2004-052188/05.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
XX microtubule-affinity-regulating kinases (MARK3), useful for modulating
XX expression of MARK3 or for treating cancer or Alzheimer's disease.
XX
XX Example 15; SEQ ID NO 20; 233pp; English.
XX
XX The invention relates to a compound comprising a sequence comprising 8-80
XX base pairs (bp) targeted to a nucleic acid encoding MARK3
XX (MAP/microtubule affinity-regulating kinase 3), that specifically
XX hybridises with the nucleic acid encoding MARK3 and inhibits expression
XX of MARK3, i.e. is an antisense oligonucleotide (AO). Also included are a
XX composition comprising the compound and a carrier or diluent, inhibiting
XX the expression of MARK3 in cells or tissues, treating an animal having or
XX suspected of having a disease or condition associated with MARK3 and
XX screening for an antisense compound. The antisense oligonucleotide is
XX useful for preparing a composition for treating hyperproliferative
XX disorder, particularly cancer and neurodegenerative diseases e.g.
XX Alzheimer's disease. The present sequence is an antisense oligonucleotide
XX targeting MARK3.
XX
XX Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 5.3e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 971 TACACCGAGCCTCAAG 987
Db 17 TACATCGAGACCTCAAG 1
XX
RESULT 305
ADJ46429/C
ID ADJ46429 standard; DNA; 20 BP.
XX
XX AC ADJ46429;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human PPP2R1A antisense oligonucleotide ISIS155015.
XX
XX Human; ss; antisense gene therapy; protein phosphatase 2A A subunit;
XX PPP2R1A; serine/threonine phosphatase; cancer; neurodegenerative disease;
XX viral infection; parasitic infection; apoptotic disorder;
XX hyperproliferative disorder.
XX
XX Homo sapiens.
XX

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FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone and all cytidines are 5
FT -methyl-cytidine"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residue"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residue"
XX US2004023381-A1.
XX
XX 05-FEB-2004.
XX
XX 30-JUL-2002; 2002US-00210589.
XX
XX 30-JUL-2002; 2002US-00210589.
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Dean NM, Dobie KW;
XX WPI; 2004-142662/14.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding PPP2R1A, useful for treating a neurodegenerative or
XX hyperproliferative disorder e.g. cancer, or diseases arising from
XX aberrant apoptosis.
XX
XX Example 15; SEQ ID NO 27; 70pp; English.
XX
XX The invention relates to a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding PPP2R1A (protein phosphatase 2A A subunit), and inhibits the
XX expression of PPP2R1A, i.e. is an antisense oligonucleotide (AS). Also
XX included are a compound 8-80 nucleobases in length that specifically
XX hybridises with at least an 8-nucleobase portion of an active site on a
XX nucleic acid molecule encoding PPP2R1A, a composition comprising the
XX compound and a carrier or diluent, inhibiting the expression of PPP2R1A
XX in cells or tissues (by contacting the cells or tissues with the compound
XX so that expression of PPP2R1A is inhibited), treating an animal having a
XX disease or condition associated with PPP2R1A (by administering to the
XX animal a therapeutic or prophylactic amount of the compound so that
XX expression of PPP2R1A is inhibited) and screening an antisense compound
XX (comprising: contacting a preferred target region of a nucleic acid
XX molecule encoding PPP2R1A with one or more candidate antisense compounds
XX comprising at least an 8-nucleobase portion that is complementary to the
XX preferred target region and selecting for one or more candidate antisense
XX compounds that inhibit the expression of a nucleic acid encoding
XX PPP2R1A). The compound, composition and methods are useful for treating a
XX disease or condition associated with PPP2R1A, such as a neurodegenerative
XX disorder, a hyperproliferative disorder, e.g. cancer, or a disease or
XX condition arising from aberrant apoptosis, viral or parasitic infection.
XX They are also useful in research and diagnostics for modulating the
XX expression of PPP2R1A. The present sequence is an antisense
XX oligonucleotide for human PPP2R1A of the invention.
XX
XX Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 5.3e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 513 CCTGAGAGCTGACCC 529
XX ||| |||||
Db 18 CCTAGAGAAGCTGACCC 2

```

```
RESULT 306
ADN97811
ID ADN97811 standard; DNA; 20 BP.
XX
AC ADN97811;
XX
DT 01-JUL-2004 (first entry)
XX
DE Human foxhead box O1A gene target sequence #4.
XX
KW ss; cytostatic; antidiabetic; foxhead box O1A inhibitor;
KW foxhead box O1A; hyperproliferative disorder; cancer; rhabdomyosarcoma;
KW diabetes; H-ras gene; antisense; gene expression; primer.
XX
OS Homo sapiens.
XX
PN WO2004031350-A2.
XX
PD 15-APR-2004.
XX
PF 25-SEP-2003; 2003WO-US030352.
XX
PR 26-SEP-2002; 2002US-00260203.
XX
PA (AMGE-) AMGEN INC.
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW, Bhanot S, Veniant-Ellison M, Lindberg RA, Shutter JR;
XX WPI; 2004-330164/30.
XX
DR New compounds, particularly antisense oligonucleotides, targeted to a
XX nucleic acid molecule encoding forkhead box O1A, useful for treating
XX cancer, or type 2 diabetes.
XX
PS Example 18; SEQ ID NO 101; 146pp; English.
XX
SS The invention relates to a compound 8-80 nucleobases in length targeted
XX to a nucleic acid molecule encoding forkhead box O1A, where the compound
XX is at least 70% complementary to a nucleic acid molecule encoding
XX forkhead box O1A and modulates expression of forkhead box O1A by at least
XX 10%. The compound is useful for treating an animal having a disease or
XX condition associated with forkhead box O1A, e.g. a hyperproliferative
XX disorder (cancer, preferably rhabdomyosarcoma), or type 2 diabetes. This
XX sequence corresponds to a targeted sequence from the human foxhead box
XX O1A gene.
XX
SQ Sequence 20 BP; 6 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1381 GCGGACCTCCTCACCAC 1397
Db 4 GCGGACCTCCTCACCAC 20
|||||

RESULT 307
ADN97731/C
ID ADN97731 standard; DNA; 20 BP.
XX
AC ADN97731;
XX
DT 01-JUL-2004 (first entry)
XX
DE Human foxhead box O1A sequence inhibitory oligo #4.
XX
KW ss; cytostatic; antidiabetic; foxhead box O1A inhibitor;
KW foxhead box O1A; hyperproliferative disorder; cancer; rhabdomyosarcoma;
KW diabetes; H-ras gene; antisense; gene expression; primer.
XX
OS Synthetic.
XX
```

```
XX Key Location/Qualifiers
FH misc_difference 1..20
FT /tag= b
FT /note= "sugar phosphate internucleotide linkages in the
FT backbone are replaced with a phosphorothioate
FT internucleotide linkages"
FT modified_base 1..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "all C are 5'-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "nucleotides are 2'-methoxyethyl-nucleotides"
FT modified_base 16..20
FT /tag= d
FT /mod_base= OTHER
FT /note= "nucleotides are 2'-methoxyethyl-nucleotides"
XX WO2004031350-A2.
XX
PN 15-APR-2004.
XX
PF 25-SEP-2003; 2003WO-US030352.
XX
PR 26-SEP-2002; 2002US-00260203.
XX
PA (AMGE-) AMGEN INC.
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW, Bhanot S, Veniant-Ellison M, Lindberg RA, Shutter JR;
XX WPI; 2004-330164/30.
XX
DR New compounds, particularly antisense oligonucleotides, targeted to a
XX nucleic acid molecule encoding forkhead box O1A, useful for treating
XX cancer, or type 2 diabetes.
XX
PS Claim 14; SEQ ID NO 21; 146pp; English.
XX
SS The invention relates to a compound 8-80 nucleobases in length targeted
XX to a nucleic acid molecule encoding forkhead box O1A, where the compound
XX is at least 70% complementary to a nucleic acid molecule encoding
XX forkhead box O1A and modulates expression of forkhead box O1A by at least
XX 10%. The compound is useful for treating an animal having a disease or
XX condition associated with forkhead box O1A, e.g. a hyperproliferative
XX disorder (cancer, preferably rhabdomyosarcoma), or type 2 diabetes. This
XX sequence corresponds to an oligonucleotide targeted to the human foxhead
XX box O1A genes in order to inhibit gene expression.
XX
SQ Sequence 20 BP; 3 A; 2 C; 9 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1381 GCGGACCTCCTCACCAC 1397
Db 17 GCGGACCTCCTCACCAC 1
|||||

RESULT 308
ADN54724
ID ADN54724 standard; DNA; 20 BP.
XX
AC ADN54724;
XX
DT 15-JUL-2004 (first entry)
XX
DE Farnesoid X receptor gene expression antisense inhibitory oligo #2097.
XX
KW ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;
XX
```


KW antiarteriosclerotic; hepatotropic; litholytic; anorectic;
 KW neuroprotective; vasotropic; antisense; gene therapy;
 KW Farnesoid X receptor; diabetes; immunological disorder;
 KW cardiovascular disorder; dyslipidemia; atherosclerosis;
 KW high density lipoprotein; low density lipoprotein; hypercholesterolemia;
 KW gallstones; hypertriglyceridemia; obesity; neurological disorder;
 KW ischemia; reperfusion; diagnostics; prophylaxis.
 XX
 OS Homo sapiens.
 XX
 XX WO2004030750-A1.
 PN
 XX 15-APR-2004.
 PD
 XX
 XX 25-SEP-2003; 2003WO-US030353.
 PF
 XX
 XX 25-SEP-2002; 2002US-0413588P.
 PR
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Kane CD;
 PI
 XX
 XX MPI; 2004-347928/32.
 DR
 XX
 XX New antisense oligonucleotides useful for modulating expression of
 PT Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,
 PT e.g. diabetes, immunological disorders, cardiovascular disorders,
 PT gallstones or obesity.
 XX
 XX Claim 4; SEQ ID NO 2097; 150pp; English.
 PS
 XX The invention relates to an antisense compound 8-30 nucleobases in length
 CC targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
 CC where the antisense compound specifically hybridizes with and inhibits
 CC the expression of FXR. The composition and methods are useful for
 CC inhibiting the expression of FXR (Farnesoid X receptor) in cells or
 CC tissues, or for treating diseases or conditions associated with FXR, such
 CC as diabetes, immunological disorders, cardiovascular disorders, e.g.
 CC dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
 CC lipoprotein), elevated LDL (low density lipoprotein) or
 CC hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,
 CC neurological disorders, or ischemia/reperfusion injury. In addition, the
 CC composition is used for diagnostics, prophylaxis, or as research reagents
 CC or kits. This sequence corresponds to an antisense oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 5.3e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1659 CACCCCTCACAGGCAG 1675
 |||||
 DB 1 CACCCCTCACAGGTCA 17
 RESULT 309
 ADOS4462
 ID ADOS4462 standard; DNA; 20 BP.
 XX
 XX AC ADOS4462;
 XX
 XX 15-JUL-2004 (first entry)
 DT
 XX Farnesoid X receptor gene expression antisense inhibitory oligo #1835.
 DE
 XX ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;
 KW antiarteriosclerotic; hepatotropic; litholytic; anorectic;
 KW neuroprotective; vasotropic; antisense; gene therapy;
 KW Farnesoid X receptor; diabetes; immunological disorder;
 KW cardiovascular disorder; dyslipidemia; atherosclerosis;
 KW high density lipoprotein; low density lipoprotein; hypercholesterolemia;
 KW gallstones; hypertriglyceridemia; obesity; neurological disorder;
 KW ischemia; reperfusion; diagnostics; prophylaxis.

KW gallstones; hypertriglyceridemia; obesity; neurological disorder;
 KW ischemia; reperfusion; diagnostics; prophylaxis.
 XX
 OS Homo sapiens.
 XX WO2004030750-A1.
 PN
 XX 15-APR-2004.
 PD
 XX
 XX 25-SEP-2003; 2003WO-US030353.
 PF
 XX
 XX 25-SEP-2002; 2002US-0413588P.
 PR
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Kane CD;
 PI
 XX
 XX MPI; 2004-347928/32.
 DR
 XX
 XX New antisense oligonucleotides useful for modulating expression of
 PT Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,
 PT e.g. diabetes, immunological disorders, cardiovascular disorders,
 PT gallstones or obesity.
 XX
 XX Claim 4; SEQ ID NO 1835; 150pp; English.
 PS
 XX The invention relates to an antisense compound 8-30 nucleobases in length
 CC targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
 CC where the antisense compound specifically hybridizes with and inhibits
 CC the expression of FXR. The composition and methods are useful for
 CC inhibiting the expression of FXR (Farnesoid X receptor) in cells or
 CC tissues, or for treating diseases or conditions associated with FXR, such
 CC as diabetes, immunological disorders, cardiovascular disorders, e.g.
 CC dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
 CC lipoprotein), elevated LDL (low density lipoprotein) or
 CC hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,
 CC neurological disorders, or ischemia/reperfusion injury. In addition, the
 CC composition is used for diagnostics, prophylaxis, or as research reagents
 CC or kits. This sequence corresponds to an antisense oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 20 BP; 5 A; 8 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 5.3e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1658 ACACCCCTCACAGGCAC 1674
 |||||
 DB 4 ACACCCCTCACAGTCA 20
 RESULT 310
 ADN03133
 ID ADN03133 standard; DNA; 20 BP.
 XX
 XX AC ADN03133;
 XX
 XX 29-JUL-2004 (first entry)
 DT
 XX Human PIM-1 DNA antisense oligonucleotide target region #12.
 DE
 XX Human; PIM-1; ss; antisense oligonucleotide; phosphorothioate linkage;
 KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
 KW hyperproliferative disorder; cancer; cytostatic.
 XX
 XX Homo sapiens.
 OS
 XX US2004092463-A1.
 PN
 XX 13-MAY-2004.
 PD
 XX
 XX 11-NOV-2002; 2002US-00292849.

XX 11-NOV-2002; 2002US-00292849.
 XX (ISIS-) ISIS PHARM INC.
 XX Watt AT;
 XX WPI; 2004-374981/35.
 XX New compound that modulates PIM-1 expression, useful in treating an
 PT animal having a disease or condition, i.e. hyperproliferative disorder.
 XX Example 15; SEQ ID NO 102; 51pp; English.
 XX The invention relates to a compound targeted to a nucleic acid molecule
 CC encoding the human PIM-1 polypeptide. The compound is an antisense
 CC oligonucleotide that specifically hybridizes with the nucleic acid and
 CC inhibits expression of the polypeptide. The antisense oligonucleotide
 CC comprises at least one modified internucleoside linkage i.e. a
 CC phosphorothioate linkage, at least one modified sugar moiety, preferably
 CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
 CC comprising a 5-methylcytosine. The antisense compounds are useful for
 CC modulating the expression of the human PIM-1 polypeptide and in
 CC preparation of a composition for treating hyperproliferative disorders,
 CC e.g. cancer. This sequence represents a human PIM-1 DNA antisense
 CC oligonucleotide target region of the invention.
 XX Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
 SQ

Query Match 0.9%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 5.3e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 249 TGACCTCTGGAGAGGCC 265
 ||| |||||
 Db 2 TGATCCTGGAGAGGCC 18

RESULT 311
 ADN03063/C
 ID ADN03063 standard; DNA; 20 BP.
 XX AC ADN03063;
 XX 29-JUL-2004 (first entry)
 XX Human PIM-1 DNA antisense oligonucleotide #20.
 XX Human; PIM-1; ss; antisense oligonucleotide; phosphorothioate linkage;
 KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
 KW hyperproliferative disorder; cancer; cytostatic.
 XX Homo sapiens.
 OS US2004092463-A1.
 PN 13-MAY-2004.
 PD 11-NOV-2002; 2002US-00292849.
 PF 11-NOV-2002; 2002US-00292849.
 XX (ISIS-) ISIS PHARM INC.
 XX Watt AT;
 XX WPI; 2004-374981/35.
 XX New compound that modulates PIM-1 expression, useful in treating an
 PT animal having a disease or condition, i.e. hyperproliferative disorder.
 XX Example 15; SEQ ID NO 32; 51pp; English.

CC The invention relates to a compound targeted to a nucleic acid molecule
 CC encoding the human PIM-1 polypeptide. The compound is an antisense
 CC oligonucleotide that specifically hybridizes with the nucleic acid and
 CC inhibits expression of the polypeptide. The antisense oligonucleotide
 CC comprises at least one modified internucleoside linkage i.e. a
 CC phosphorothioate linkage, at least one modified sugar moiety, preferably
 CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
 CC comprising a 5-methylcytosine. The antisense compounds are useful for
 CC modulating the expression of the human PIM-1 polypeptide and in
 CC preparation of a composition for treating hyperproliferative disorders,
 CC e.g. cancer. This sequence represents a human PIM-1 DNA antisense
 CC oligonucleotide of the invention.
 XX Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 0.9%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 5.3e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 249 TGACCTCTGGAGAGGCC 265
 ||| |||||
 Db 19 TGATCCTGGAGAGGCC 3

RESULT 312
 ADN40747
 ID ADN40747 standard; DNA; 20 BP.
 XX AC ADN40747;
 XX 12-AUG-2004 (first entry)
 XX Human forkhead box O1A DNA antisense oligonucleotide target region #4.
 DE Human; forkhead box O1A; ss; antisense oligonucleotide;
 KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
 KW 5-methylcytosine; hyperproliferative disorder; cancer; rhabdomyosarcoma;
 KW type 2 diabetes; cytostatic; antidiabetic.
 XX Homo sapiens.
 OS US2004097459-A1.
 PN 20-MAY-2004.
 PD 25-SEP-2003; 2003US-00671074.
 PF 26-SEP-2002; 2002US-00260203.
 PR (DOBI/) DOBIE K W.
 PA (BHAN/) BHANOT S.
 PA (VENI/) VENIANT-ELLISON M.
 PA (LIND/) LINDBERG R A.
 PA (SHUT/) SHUTTER J R.
 XX Dobie KW, Bhanot S, Veniant-Ellison M, Lindberg RA, Shutter JR;
 WPI; 2004-389194/36.
 XX New compounds, particularly antisense oligonucleotides, targeted to a
 PT nucleic acid molecule encoding forkhead box O1A, useful for treating
 PT cancer, or type 2 diabetes.
 XX Example 18; SEQ ID NO 101; 80pp; English.
 PS The invention relates to a compound targeted to a nucleic acid molecule
 CC encoding the human forkhead box O1A polypeptide. The compound is an
 CC antisense oligonucleotide that specifically hybridizes with the nucleic
 CC acid and inhibits expression of the polypeptide. The antisense
 CC oligonucleotide comprises at least one modified internucleoside linkage
 CC i.e. a phosphorothioate linkage, at least one modified sugar moiety,
 CC preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
 CC nucleobase comprising a 5-methylcytosine. The antisense compounds are

CC useful for modulating the expression of the human forkhead box O1a
CC polypeptide and in preparation of a composition for treating
CC hyperproliferative disorders, e.g. cancer, preferably rhabdomyosarcoma,
CC and type 2 diabetes. This sequence represents a human forkhead O1a DNA
CC antisense oligonucleotide target region of the invention.
XX
SQ Sequence 20 BP; 6 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1381 GCCGACCTCTCACCACCA 1397
Db 4 GCCGACCTCTCACCACCA 20
RESULT 313
ADN40667/C
ID ADN40667 standard; DNA; 20 BP.
XX
AC ADN40667;
XX
DT 12-AUG-2004 (first entry)
XX
XX Human forkhead box O1a DNA antisense oligonucleotide #4.
XX
DE Human; forkhead box O1a; ss; antisense oligonucleotide;
XX
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; hyperproliferative disorder; cancer; rhabdomyosarcoma;
KW type 2 diabetes; cytostatic; antidiabetic.
XX
OS Homo sapiens.
XX
XX US2004097459-A1.
XX
XX 20-MAY-2004.
XX
XX 25-SEP-2003; 2003US-00671074.
XX
XX 26-SEP-2002; 2002US-00260203.
XX
XX (DOB) DOBIE K W.
PA (BHANT) BHANT S.
PA (VENI) VENIANT-ELLISON M.
PA (LIND) LINDBERG R. A.
PA (SHUT) SHUTTER J R.
XX
PI Dobie KW, Bhant S, Veniant-Ellison M, Lindberg RA, Shutter JR;
XX WPI; 2004-389194/36.
XX
XX New compounds, particularly antisense oligonucleotides, targeted to a
XX nucleic acid molecule encoding forkhead box O1a, useful for treating
XX cancer, or type 2 diabetes.
XX
XX Claim 14; SEQ ID NO 21; 80pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding the human forkhead box O1a polypeptide. The compound is an
XX antisense oligonucleotide that specifically hybridizes with the nucleic
XX acid and inhibits expression of the polypeptide. The antisense
XX oligonucleotide comprises at least one modified internucleoside linkage
XX, i.e. a phosphorothioate linkage, at least one modified sugar moiety,
XX preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
XX nucleobase comprising a 5-methylcytosine. The antisense compounds are
XX useful for modulating the expression of the human forkhead box O1a
XX polypeptide and in preparation of a composition for treating
XX hyperproliferative disorders, e.g. cancer, preferably rhabdomyosarcoma,
XX and type 2 diabetes. This sequence represents an antisense
XX oligonucleotide targeted to DNA encoding the human forkhead O1a
XX polypeptide of the invention.

SQ Sequence 20 BP; 3 A; 2 C; 9 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1381 GCCGACCTCTCACCACCA 1397
Db 17 GCCGACCTCTCACCACCA 1
RESULT 314
ADP27305/C
ID ADP27305 standard; DNA; 20 BP.
XX
AC ADP27305;
XX
DT 26-AUG-2004 (first entry)
XX
DE Rat MMP11 DNA antisense oligonucleotide target region #3.
XX
KW Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
XX
OS Rattus norvegicus.
XX
XX US2004110152-A1.
XX
XX 10-JUN-2004.
XX
XX 10-DEC-2002; 2002US-00316755.
XX
XX 10-DEC-2002; 2002US-00316755.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowsett LM;
XX WPI; 2004-440341/41.
XX
XX New oligonucleotide compound that inhibits expression of matrix
XX metalloproteinase 11, useful for preparing a composition for treating
XX hyperproliferative disorder, e.g., cancer.
XX
XX Example 16; SEQ ID NO 231; 76pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound
XX is an antisense oligonucleotide that specifically hybridizes with the
XX nucleic acid and inhibits expression of the polypeptide. The antisense
XX oligonucleotide comprises at least one modified internucleoside linkage
XX, i.e. a phosphorothioate linkage, at least one modified sugar moiety,
XX preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
XX nucleobase comprising a 5-methylcytosine. The antisense compounds are
XX useful for modulating the expression of the MMP11 polypeptide and in
XX preparation of a composition for treating hyperproliferative disorders,
XX e.g. cancer. This sequence represents a rat MMP11 DNA antisense
XX oligonucleotide target region of the invention.
XX
XX Sequence 20 BP; 2 A; 9 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1038 TGGCCTGGCCCGGCCA 1054
Db 17 TGGCCTGGCCCGGCCA 1
RESULT 315
ADP27174

ID ADP27174 standard; DNA; 20 BP.
 XX
 AC ADP27174;
 XX
 XX
 DT 26-AUG-2004 (first entry)
 XX
 DE Rat matrix metalloproteinase 11 DNA antisense oligonucleotide #5.
 XX
 KW Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide;
 XX phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
 KW 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
 XX
 OS Rattus norvegicus.
 XX
 XX US2004110152-A1.
 PN
 XX 10-JUN-2004.
 PD
 XX 10-DEC-2002; 2002US-00316755.
 PF
 XX 10-DEC-2002; 2002US-00316755.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA Baker BF, Cowsert LM;
 PI WPI; 2004-440341/41.
 DR
 XX New oligonucleotide compound that inhibits expression of matrix
 PT metalloproteinase 11, useful for preparing a composition for treating
 PT hyperproliferative disorder, e.g., cancer.
 XX
 XX Example 16; SEQ ID NO 100; 76pp; English.
 PS
 XX The invention relates to a compound targeted to a nucleic acid molecule
 CC encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound
 CC is an antisense oligonucleotide that specifically hybridizes with the
 CC nucleic acid and inhibits expression of the polypeptide. The antisense
 CC oligonucleotide comprises at least one modified internucleoside linkage
 CC i.e. a phosphorothioate linkage, at least one modified sugar moiety,
 CC preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
 CC nucleobase comprising a 5-methylcytosine. The antisense compounds are
 CC useful for modulating the expression of the MMP11 polypeptide and in
 CC preparation of a composition for treating hyperproliferative disorders,
 CC e.g. cancer. This sequence represents an antisense oligonucleotide
 CC targeted to DNA encoding the rat MMP11 polypeptide of the invention.
 XX
 SQ Sequence 20 BP; 1 A; 8 C; 9 G; 2 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 5.3e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 1038 TGGCCTGGCCCGGCCA 1054
 DB 4 TGGCCTGGCCCGGCCA 20
 |||||
 RESULT 316
 ADQ08032/c
 ID ADQ08032 standard; DNA; 20 BP.
 XX
 AC ADQ08032;
 XX
 DT 23-SEP-2004 (first entry)
 XX
 DE Human beta-site APP-cleaving enzyme 2 DNA antisense oligonucleotide #10.
 XX
 DE Human; beta-site APP-cleaving enzyme 2; ss; antisense oligonucleotide;
 KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
 KW 5-methylcytosine; sporadic inclusion-body myositis; cancer; cytostatic.
 XX
 XX Homo sapiens.

XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= Phosphorothioate backbone. All cytidines
 FT are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
 FT modified_base 15..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
 XX
 PN US2004132681-A1.
 XX
 XX 08-JUL-2004.
 PD
 XX 16-SEP-2003; 2003US-00663452.
 PF
 XX 04-JUN-2002; 2002US-00163272.
 PR
 XX (DOI/) DOBIE K W.
 PA
 XX Dobie KW;
 PI
 XX WPI; 2004-517033/49.
 DR
 XX New antisense compound, useful for treating diseases associated with
 PT expression of beta-site amyloid precursor protein (APP)-cleaving enzyme 2
 PT such as sporadic inclusion-body myositis and cancer.
 XX
 PS Claim 19; SEQ ID NO 20; 61pp; English.
 XX The invention relates to a compound targeted to a nucleic acid molecule
 CC encoding the human beta-site APP-cleaving enzyme 2 polypeptide. The
 CC compound is an antisense oligonucleotide that specifically hybridizes
 CC with the nucleic acid and inhibits expression of the polypeptide. The
 CC antisense oligonucleotide comprises at least one modified internucleoside
 CC linkage i.e. a phosphorothioate linkage, at least one modified sugar
 CC moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one
 CC modified nucleobase comprising a 5-methylcytosine. The antisense
 CC compounds are useful for modulating the expression of the human beta-site
 CC APP-cleaving enzyme 2 polypeptide and for treating diseases associated
 CC with expression of beta-site APP-cleaving enzyme 2 such as sporadic
 CC inclusion-body myositis and cancer. This sequence represents an antisense
 CC oligonucleotide targeted to DNA encoding the human beta-site APP-cleaving
 CC enzyme 2 polypeptide of the invention.
 XX
 SQ Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 5.3e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 510 CTACCTGGAGAGCTGA 526
 DB 18 CTACCTGGAGAGCTGA 2
 |||||
 RESULT 317
 ADQ08109
 ID ADQ08109 standard; DNA; 20 BP.
 XX
 AC ADQ08109;
 XX
 DT 23-SEP-2004 (first entry)
 XX
 DE Human beta-site APP-cleaving enzyme 2 DNA target region #9.
 XX
 KW Human; beta-site APP-cleaving enzyme 2; ss; antisense oligonucleotide;

KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; sporadic inclusion-body myositis; cancer; cytostatic.
OS Homo sapiens.
XH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT modified_base 15..20
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
PN US2004132681-A1.
XX
XX 08-JUL-2004.
XX
XX 16-SEP-2003; 2003US-00663452.
XX
XX 04-JUN-2002; 2002US-00163272.
XX (DOI/) DOBIE K W.
XX
XX Dobie KW;
XX
XX WPI; 2004-517033/49.
XX
XX New antisense compound, useful for treating diseases associated with
PT expression of beta-site amyloid precursor protein (APP)-cleaving enzyme 2
PT such as sporadic inclusion-body myositis and cancer.
XX
XX Example 15; SEQ ID NO 97; 61pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding the human beta-site APP-cleaving enzyme 2 polypeptide. The
CC compound is an antisense oligonucleotide that specifically hybridises
CC with the nucleic acid and inhibits expression of the polypeptide. The
CC antisense oligonucleotide comprises at least one modified internucleoside
CC linkage i.e. a phosphorothioate linkage, at least one modified sugar
CC moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one
CC modified nucleobase comprising a 5-methylcytosine. The antisense
CC compounds are useful for modulating the expression of the human beta-site
CC APP-cleaving enzyme 2 polypeptide and for treating diseases associated
CC with expression of beta-site APP-cleaving enzyme 2 such as sporadic
CC inclusion-body myositis and cancer. This sequence represents a human beta
CC -site APP-cleaving enzyme 2 DNA antisense oligonucleotide target region
CC of the invention.
XX
SQ Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 510 CTACTCTGGAGAGCTGA 526
|||||
Db 3 CTACTGGAGATGCTGA 19

RESULT 318
AAV13323
ID AAV13323 standard; DNA; 21 BP.
XX
AC AAV13323;
XX
XX 14-MAY-1998 (first entry)
DT

XX Sense primer Exon 5 for human 5-lipoxygenase gene.
DE
XX
KW Inflammatory disease; polymorphism; 5-lipoxygenase; asthma;
KW ulcerative colitis; bronchitis; sinusitis; psoriasis; rhinitis;
KW arthritis; diagnosis; treatment; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9742347-A2.
XX
XX 13-NOV-1997.
XX
XX 29-APR-1997; 97WO-US007137.
XX
XX 06-MAY-1996; 96US-0016890P.
XX 25-APR-1997; 97US-00846020.
XX (BGMH) BRIGHAM & WOMENS HOSPITAL.
XX
XX Drazen JM, In K, Asano K, Beier D, Grobholz J;
XX WPI; 1997-558997/51.
XX
XX Classifying patients with inflammatory disease, specifically asthma -
PT according to polymorphisms in 5-lipoxygenase gene regulatory region, e.g.
PT to identify candidates for lipoxygenase inhibitor treatment.
XX
XX Example 1; Page 19; 56pp; English.
XX
XX The present sequence was used in the development of a novel method for
CC classifying patients suffering from an inflammatory disease. The method
CC comprises identifying in DNA from at least 1 patient a sequence
CC polymorphism, as compared with the normal 5-lipoxygenase (5-LOX) gene
CC (AA189431), in a 5-LOX regulatory gene sequence. The method can be
CC applied to subjects with asthma, ulcerative colitis, bronchitis,
CC sinusitis, psoriasis, allergic and non-allergic rhinitis, lupus or
CC rheumatoid arthritis. Specifically it can be used to diagnose asthma or
CC susceptibility to disease, identify treatments suitable for individual
CC patients or assess the likely success of treatment
XX
SQ Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 992 AGAACCTGCTCATCAAC 1008
|||||
Db 4 AGAACCTGCTCATCAAC 20

RESULT 319
AAV20817/C
ID AAV20817 standard; DNA; 21 BP.
XX
XX AAV20817;
XX
XX 16-JUL-1998 (first entry)
DT
XX
XX Primer for Human haematopoietic stem cell growth factor.
DE
XX
KW Haematopoietic stem cell growth factor; SCGF; burst-promoting activity;
KW BPA; granulocyte macrophage colony stimulating activity; gene therapy;
KW GPA; haematopoietic cell disorder; bone marrow inhibition; human;
KW PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
XX WO9808869-A1.
PN
XX

```

PD 05-MAR-1998.
XX
PF 27-AUG-1997; 97WO-JP002985.
XX
PR 27-AUG-1996; 96JP-00262252.
PR 24-MAR-1997; 97JP-00087242.
PR 07-JUL-1997; 97WO-JP002349.
XX
PA (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI Hiraoka A, Sugimura A, Mio H;
XX
DR WPI; 1998-179383/16.
XX
PT Haematopoietic stem cell growth factor - useful for, e.g. treatment and
PT diagnosis of haematopoietic cell abnormalities and bone marrow
PT inhibition.
XX
PS Example 21; Page 49; 85pp; Japanese.
XX
CC This sequence is a primer for DNA encoding the human haematopoietic stem
CC cell growth factor (SCGF) of the invention. The polypeptide of the
CC invention is of mammalian origin and has haematopoietic stem cell growth
CC factor SCGF activity, including burst-promoting activity (BPA) and
CC granulocyte macrophage colony stimulating activity (GPA). The products
CC can be used for treatment, diagnosis and analysis of haematopoietic cell
CC disorders and bone marrow inhibition, e.g. by cytotoxic anticancer agents
CC such as 5-fluorouracil. The products can also be used for amplification
CC of haematopoietic cells in vitro, e.g. for use in marrow grafting and
CC gene therapy by insertion of SCGF gene using a suitable therapeutic
CC vector
XX
SQ Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 614 CCTACATTAAGCTGGAC 630
Db 19 CCTGCATTAAAGCTGGAC 3

RESULT 320
AAF97411
ID AAF97411 standard; DNA; 21 BP.
XX
AC AAF97411;
XX
DT 06-JUN-2001 (first entry)
XX
DE Human gene single nucleotide polymorphism #2172.
XX
KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(11,A)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
PN WO200118250-A2.
XX
PD 15-MAR-2001.
XX
PF 07-SEP-2000; 2000WO-US024503.
PR 10-SEP-1999; 99US-0153357P.
PR 26-JUL-2000; 2000US-0220947P.

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PR 16-AUG-2000; 2000US-0225724P.
XX
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GO, McCarthy JU;
XX
DR WPI; 2001-226749/23.
XX
PT Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX
PS Example; Page 197; 242pp; English.
XX
CC The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 6 A; 4 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 715 CTGGAACATGAAGAGGG 731
Db 4 CTGGAACGTGAAGAGGG 20

RESULT 321
AAD38761
ID AAD38761 standard; DNA; 21 BP.
XX
AC AAD38761;
XX
DT 23-SEP-2002 (first entry)
XX
DE Escherichia coli pOI57 plasmid DNA amplifying PCR primer, stcE3'1773.
XX
KW pOI57 plasmid; stcE protein; haemolytic uraemic syndrome; proteolysis;
KW Cl-esterase inhibitor; enterohaemorrhagic pathogen; antiinflammatory;
KW colitis; antibacterial; antidiarrhoeic; PCR; primer; ss.
XX
OS Escherichia coli.
XX
PN WO200234918-A2.
XX
PD 02-MAY-2002.
XX
PF 26-OCT-2001; 2001WO-US047719.
XX
PR 26-OCT-2000; 2000US-0243675P.
XX
PA (WISC ) WISCONSIN ALUMNI RES FOUND.
XX
PI Welch RA, Lathem WW;
XX
DR WPI; 2002-471441/50.
XX
PT New pOI57 plasmid-specified polypeptide found in Escherichia coli and
PT other enterohaemorrhagic Escherichia coli, that binds to and cleaves Cl-
PT esterase inhibitor, useful for diagnosing and treating colitis.
XX

```

PS Example; Page 24; 58pp; English.

XX The present invention relates to novel p0157 plasmid-specified proteins
CC found in Escherichia coli EDL933 and other enterohaemorrhagic E. coli,
CC designated StcE, that bind to and cleave Cl-esterase inhibitor. Sequences
CC of the invention are useful for diagnosing, preventing or treating
CC enterohaemorrhagic syndrome or colitis in a subject infected with an
CC enterohaemorrhagic pathogen expressing inhibitor protein. They are useful
CC for testing a molecule for the ability to reduce proteolysis of Cl
CC esterase inhibitor by inhibitor protein. The present sequence is a PCR
CC primer which is used for amplifying E. coli p0157 plasmid DNA encoding
CC StcE protein. This primer is used in the exemplification of the invention
XX

SQ Sequence 21 BP; 5 A; 4 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1220 CGGTGGAGGACAGCTA 1236
DB 1 CGGTGGAGGACGCTA 17
|||||

RESULT 322

AAX57349
ID AAX57349 standard; DNA; 23 BP.

XX AAX57349;

XX 22-JUL-1999 (first entry)

XX Parvovirus BL9 PCR primer 2.

XX Detection; viral concentration; blood plasma; serum; PCR sensitivity;
XX extraction; amplification; detection; PCR primer; ss.

OS Synthetic.

OS Parvovirus.

XX EP922771-A2.

XX 16-JUN-1999.

XX 03-NOV-1998; 98EP-00120799.

XX 28-NOV-1997; 97DE-01052898.

XX (CENT-) CENTEON PHARMA GMBH.

XX Weimer T, Groener A;

XX WPI; 1999-329400/28.

XX Process to detect high concentrations of virus in blood plasma or serum,
XX by restricting the sensitivity of PCR.

XX Example 1; Page 6; 8pp; German.

XX This invention describes a novel method for for detection of high viral
CC concentrations in blood plasma or serum by restriction of PCR sensitivity
CC through suboptimal nucleic acid extraction, amplification and detection
CC conditions. The method described is used to detect high concentrations of
CC Parvovirus in the blood plasma or serum of humans. The method detects
CC Parvovirus DNA with a content in humans of greater than 106 to 107 genome
CC equivalents
XX

SQ Sequence 23 BP; 6 A; 10 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 23;
Best Local Similarity 94.1%; Pred. No. 6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1226 AGGACAGCTACACTTC 1242
DB 2 AGGACAGCTACACTTC 18
|||||

RESULT 323

ADE36722/c

ID ADE36722 standard; DNA; 23 BP.

XX ADE36722;

XX 29-JAN-2004 (first entry)

XX DE3-1 plasmid construction related oligonucleotide SEQ ID NO:11.

XX neoplasm; ErbB-3; immune response; cytostatic; gene therapy; cancer;
XX human; ss.

OS Synthetic.

OS Homo sapiens.

XX WO2003080835-A1.

XX 02-OCT-2003.

XX 26-MAR-2003; 2003WO-CN000217.

XX 26-MAR-2002; 2002CN-00116259.

XX (ZENS-) ZENSUN SHANGHAI SCI TECH LTD.

XX Zhou M;

XX WPI; 2003-876924/81.

XX Use of an ErbB-3 protein, a nucleic acid encoding an ErbB-3 protein or
XX their fragments, for treating, preventing or delaying neoplasms (e.g.
XX urethra, uterus, vagina or vulva neoplasm) or cancers (e.g. breast, ovary
XX or colon cancer).

XX Example; SEQ ID NO 11; 68pp; English.

XX The present invention describes a method for treating, preventing or
XX delaying neoplasm in a mammal. The method comprises administering an ErbB
XX -3 protein, a nucleic acid encoding an ErbB-3 protein, or their
XX functional fragments, where an immune response is generated against the
XX neoplasm. ErbB-3 has cytostatic activity, and can be used in gene
XX therapy. The method is useful for treating, preventing or delaying
XX neoplasms (e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder,
XX bone, brain, breast, buccal, central nervous system, cervix, colon, ear,
XX endometrium, oesophagus, eye, eyelids, fallopian tube, gastrointestinal
XX tract, head and neck, heart, kidney, larynx, liver, lung, mandible,
XX mandibular condyle, maxilla, mouth, nasopharynx, nose, oral cavity,
XX ovary, pancreas, parotid gland, penis, pinna, pituitary, prostate gland,
XX rectum, retina, salivary glands, skin, small intestine, spinal cord,
XX stomach, testes, thyroid, tonsil, urethra, uterus, vagina
XX vestibulocochlear nerve, or vulva neoplasm), or cancers (breast, ovary,
XX stomach, prostate, colon and lung cancer). The present sequence
XX represents an oligonucleotide used in the construction of a plasmid
XX comprising ErbB-3, which is used in an example from the present
XX invention.

SQ Sequence 23 BP; 7 A; 12 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 23;
Best Local Similarity 94.1%; Pred. No. 6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 229 AGTGGTGGTGGTGGCGG 245

DB 20 AGTGGTGGTGGTGG 4
|||||

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RESULT 324
AAT11977/c
ID AAT11977 standard; DNA; 20 BP.
XX
AC AAT11977;
XX
XX 25-MAR-2003 (revised)
DT 13-MAR-1996 (first entry)
XX
DE CMV antisense oligonucleotide (ISIS 5477).
XX
XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /*note= "phosphorothioate backbone"
XX
XX US5442049-A.
PN
PD 15-AUG-1995.
XX
PF 25-JAN-1993; 93US-00009263.
XX
PR 19-NOV-1992; 92US-00927506.
XX
PA (ISIS-) ISIS PHARM INC.
PI Baker B, Draper K, Anderson K;
XX
XX WPI; 1995-292538/38.
DR
XX
XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
PT treatment of CMV diseases.
XX
XX Example 10; Col 17; 66pp; English.
PS
XX
XX AAT11971-84 are antisense oligonucleotides (ONs) against human
CC cytomegalovirus (CMV) that displayed activities of at least 50 % of
CC control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
CC mismatches could be tolerated without loss of antiviral activity.
CC Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA
CC polymerase proteins have been shown to be effective in therapy,
CC prophylaxis and diagnosis of CMV infection. The ONs may be modified to
CC reduce nuclease resistance and to increase their efficacy. Modifications
CC include phosphorothioate backbones, alkyl and halogen-substituted sugar
CC moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF
CC field.)
XX
XX Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAAAACG 149
DB 20 CGCAAGAGAGAGCAAAACG 1

RESULT 325
AAT01675/c
ID AAT01675 standard; DNA; 20 BP.
XX
XX AAT01675;
AC
XX
XX 17-DEC-1995 (first entry)
DT
XX
XX Peptide nucleic acid targeting CMV IE2 nuc sig 2.
DE

```

```

XX peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
KW antiviral; diagnostic; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..20
FT /*tag= a
FT /*note= "at least one (and preferably all) of the backbone
FT subunits are composed of amide units, so that the
FT oligomer consists of the nucleobases attached covalently
FT to a polyamide backbone"
XX
XX W09504748-A1.
PN
PD 16-FEB-1995.
XX
PF 09-AUG-1994; 94WO-US009039.
XX
PR 09-AUG-1993; 93US-00104438.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowser LM;
PI
XX
XX WPI; 1995-090841/12.
DR
XX
XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
PT papilloma-virus - are stable anti-sense molecules with high affinity for
PT single stranded DNA, used for treating infections.
XX
XX Claim 2; Page 44; 65pp; English.
PS
XX
XX New oligomers are claimed which (A) have at least one peptide nucleic
CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'
CC untranslated region, intron/exon (I/E) junction or coding sequence of
CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
CC papillomavirus. The PNAs can be used to target RNA and single stranded
CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence
CC they may be used therapeutically for modulating cytomegalovirus and
CC papillomavirus processes and also as diagnostics (e.g., as probes for
CC specific mRNAs). PNA oligomers have high affinity for complementary
CC single stranded DNA. They are also able to form triple helices in which a
CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds
CC with the resulting double helix or with the first PNA strand. The PNAs
CC possess no significant charge and are water soluble, which facilitates
CC cellular uptake. Further, since they contain amides of non-biological
CC amino acids, they are biostable and resistant to enzymatic degradation by
CC proteases. The present sequence targets CMV IE2 nuclear localisation
CC signal 2
XX
XX Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAAAACG 149
DB 20 CGCAAGAGAGAGCAAAACG 1

RESULT 326
AAX63365/c
ID AAX63365 standard; DNA; 20 BP.
XX
XX AAX63365;
AC
XX
XX 16-JUL-1999 (first entry)
DT
XX
XX Granule bound starch synthase primer #2.
DE

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XX Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;
KW granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;
KW modulation; gene expression; transgenic plant; cleavage; canola plant;
KW caffeine synthesis; coffee plant; nicotine production; tobacco;
KW fruit ripening; flower pigmentation; lignin production; ss.
XX Synthetic.
OS Zea mays.
XX W09710328-A2.
XX 20-MAR-1997.
XX 12-JUL-1996; 96WO-US011689.
XX 13-JUL-1995; 95US-0001135P.
XX (RIBO-) RIBOZYME PHARM INC.
PA (DWC ) DOWELANCO.
XX Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;
PI Young SA, Folkerts O, Merlo DJ;
XX WPI; 1997-202224/18.
XX Ribozyme which modulates plant gene expression - preferably modulates
PT expression of DELTA-9 desaturase or granule bound starch synthase in
XX maize or canola.
XX Example 27; Page 51; 155pp; English.
XX The present invention describes an enzymatic nucleic acid molecule (I)
CC with RNA cleaving activity, which modulates the expression of a plant
CC gene. Also described is a gene comprising a cDNA sequence encoding maize
CC Delta-9 desaturase. (I) can be used to modulate expression of a gene,
CC preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)
CC gene, in a plant (preferably a maize or canola plant). (I) can be used to
CC modulate caffeine synthesis in a coffee plant, nicotine production in a
CC tobacco plant, fruit ripening processes in an apple, tomato, pear, plum
CC or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or
CC marigold plant or lignin production in a tobacco, aspen, poplar or pine
CC plant
XX
XX Sequence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 377 CTTGAGCAGCTGCTCGGAT 396
DB 20 CATCAGCCAGCGCATCGGAT 1
RESULT 327
AA17949/C
ID AA17949 standard; DNA; 20 BP.
XX AC
XX AA17949;
XX 11-MAY-1999 (first entry)
XX DE
XX Anti-CMV oligonucleotide #15103.
XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
KW cytomagalovirus; inhibition; replication; sugar modification;
KW phosphorothioate; infection; retinitis; ss.
XX Synthetic.
OS Human herpesvirus 5.
XX FH Key Location/Qualifiers

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```

FT modified_base 1. .20
FT /*tag= a
FT /note= "contains phosphorothioate internucleotide
FT linkages"
FT modified_base 1. .20
FT /*tag= b
FT /note= "all C bases are 5'-methyl-cytosine"
FT modified_base 1. .6
FT /*tag= b
FT /note= "2'-methoxyethoxy sugar moieties"
FT modified_base 14. .20
FT /*tag= b
FT /note= "2'-methoxyethoxy sugar moieties"
XX W09845314-A1.
XX 15-OCT-1998.
XX 07-APR-1998; 98WO-US006895.
XX 09-APR-1997; 97US-00838715.
XX (ISIS-) ISIS PHARM INC.
XX Draper KG, Kisner DL, Anderson KP, Chapman S;
XX WPI; 1998-568330/48.
XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -
PT particularly including 2-methoxyethoxy sugar modifications, especially
PT for treating viral retinitis, with long-lasting retention in the retina.
XX Claim 7; Page 32; 99pp; English.
XX This antisense oligonucleotide is targeted to a nucleic acid sequence in
CC the IE (immediate early) 2 region of the cytomegalovirus (CMV) genome and
CC is able to inhibit CMV replication. Optionally the oligonucleotide
CC include at least one 2'-(2-methoxyethoxy) sugar modification or
CC phosphorothioate internucleotide linkages. The oligonucleotides (AA17861
CC -X17924) are also used to inhibit CMV infections (by in vivo or in vitro
CC contact with cells, tissues or body fluids), especially to treat or
CC prevent CMV infections, particularly retinitis
XX
XX Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAGAGATCAACG 149
DB 20 CGCAAGAAGAAGCAACG 1
RESULT 328
AA17894/C
ID AA17894 standard; DNA; 20 BP.
XX AC
XX AA17894;
XX 11-MAY-1999 (first entry)
XX DE
XX Anti-CMV oligonucleotide #5477.
XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
KW cytomagalovirus; inhibition; replication; sugar modification;
KW phosphorothioate; infection; retinitis; ss.
XX Synthetic.
OS Human herpesvirus 5.
XX PN W09845314-A1.

```

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PD 15-OCT-1998.
XX
XX 07-APR-1998; 98WO-US0006895.
XX
PR 09-APR-1997; 97US-00838715.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Draper KG, Kisner DL, Anderson KP, Chapman S;
XX
XX WPI; 1998-568330/48.
XX
XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -
XX particularly including 2-methoxyethoxy sugar modifications, especially
XX for treating viral retinitis, with long-lasting retention in the retina.
XX
XX Claim 7; Page 30; 99pp; English.
XX
XX Antisense oligonucleotides (AAAX17861-X17924) are targeted to a nucleic
XX acid (AAAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
XX polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
XX replication. Optionally the oligonucleotides include at least one 2'-(2-
XX methoxyethoxy) sugar modification or phosphorothioate internucleotide
XX linkages. The oligonucleotides are used to inhibit CMV infections (by in
XX vivo or in vitro contact with cells, tissues or body fluids), especially
XX to treat or prevent CMV infections, particularly retinitis
XX
XX Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAAGC 149
DB 20 CGCAAGAGAGAGCAACG 1

RESULT 329
AAZ18135
ID AAZ18135 standard; DNA; 20 BP.
XX
XX AAZ18135;
AC
DT 11-OCT-1999 (first entry)
XX
XX STK 7 gene specific primer.
DE
XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
XX genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
XX kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
XX primer; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX WO9934016-A2.
XX
XX 08-JUL-1999.
XX
XX 28-DEC-1998; 98WO-IL000625.
XX
XX 29-DEC-1997; 97IL-00122793.
XX
XX 16-OCT-1998; 98IL-00126627.
XX
XX (GENE-) GENENA LTD.
XX
XX Vider B;
XX
XX WPI; 1999-419113/35.
XX
XX P-PSDB; AAY14670.
XX
XX Identifying and characterizing cells by comparing the pattern of gene
PT

```

```

PT expression in a selected gene family.
XX
XX Claim 4; Page 44; 102pp; English.
XX
XX The invention provides a new method for identifying and characterising
XX cells. The method for determining the genetic proximity of a first cell
XX and a second cell comprises: (a) obtaining the first cell and the second
XX cell; (b) determining in the first cell and the second cell the pattern
XX of expression of genes in a selected gene family; and (c) calculating a
XX proximity index using a specified formula. The methods can be used for
XX characterising cells, e.g. for determining the origin of a cell, its
XX genetic status, whether it carries a genetic defect, or whether it is
XX transformed. They can be used for detecting a selected genetic defect in
XX an individual, e.g. a fetus. They can also be used for determining the
XX effect of a selected treatment on a test cell. They can also be used for
XX obtaining cells capable of expressing an homeobox related desired
XX property. The method uses reverse transcriptase polymerase chain reaction
XX (RT-PCR) for determining the pattern of gene expression in a selected
XX gene family. Sequences AAZ17803-Z18342 represent primers that can be used
XX in the RT-PCR reactions to determine the pattern of gene expression. The
XX gene family can be selected from a set of homeobox genes, kinase genes,
XX protein phosphatase genes, P450 enzyme genes, steroid receptor
XX superfamily genes or cadherin superfamily genes
XX
XX Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 970 CTACACCGAGACTCAAGCC 989
DB 1 CTGCACCGTGACTCAAGAC 20

RESULT 330
AAZ18149
ID AAZ18149 standard; DNA; 20 BP.
XX
XX AAZ18149;
AC
DT 11-OCT-1999 (first entry)
XX
XX STK 14 gene specific primer.
DE
XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
XX genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
XX kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
XX primer; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX WO9934016-A2.
XX
XX 08-JUL-1999.
XX
XX 28-DEC-1998; 98WO-IL000625.
XX
XX 29-DEC-1997; 97IL-00122793.
XX
XX 16-OCT-1998; 98IL-00126627.
XX
XX (GENE-) GENENA LTD.
XX
XX Vider B;
XX
XX WPI; 1999-419113/35.
XX
XX P-PSDB; AAY14684.
XX
XX Identifying and characterizing cells by comparing the pattern of gene
PT expression in a selected gene family.
XX
XX Claim 4; Page 45; 102pp; English.
XX

```

XX The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell
 CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining in the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AA217803-218342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX
 SQ Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 5.8e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 970 CTACACCGAGACCTCAAGCC 989
 |||||
 Db 1 CTGACCGTGACCTCAAGAC 20

RESULT 331
 AA218163
 ID AA218163 standard; DNA; 20 BP.
 XX AC AA218163;
 XX DT 11-OCT-1999 (first entry)
 XX DE STK 21 gene specific primer.
 XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX WO9934016-A2.
 XX 08-JUL-1999.
 XX 28-DEC-1998; 98WO-IL000625.
 XX 29-DEC-1997; 97IL-00122793.
 XX 16-OCT-1998; 98IL-00126627.
 XX (GENE-) GENENA LTD.
 XX Vidar B;
 XX WPI; 1999-419113/35.
 XX P-ESDB; AAY14698.
 XX Identifying and characterizing cells by comparing the pattern of gene
 PT expression in a selected gene family.
 XX Claim 4; Page 45; 102pp; English.
 XX The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell

CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining in the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AA217803-218342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX
 SQ Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 5.8e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 970 CTACACCGAGACCTCAAGCC 989
 |||||
 Db 1 CTGACCGTGACCTCAAGAC 20

RESULT 332
 AA2186355
 ID AA2186355 standard; DNA; 20 BP.
 XX AC AA2186355;
 XX DT 29-SEP-1999 (first entry)
 XX DE PCR primer used to amplify the penicillin G amidase gene.
 XX groESL gene; expression vector; tac promoter; groEL; intergenic region;
 KW cephalosporin amidase; penicillin G amidase; PCR primer; ss.
 XX Synthetic.
 OS Escherichia coli.
 XX WO9931220-A1.
 XX 24-JUN-1999.
 XX 11-DEC-1998; 98WO-US026343.
 XX 16-DEC-1997; 97US-0069751P.
 XX (BRIM) BRISTOL-MYERS SQUIBB CO.
 XX Liu SW, Franceschini T;
 XX WPI; 1999-457923/38.
 XX New high expression vector for Escherichia coli useful for expression of
 PT heterologous genes.
 XX Disclosure; Page 10; 37pp; English.
 XX PCR primers AA2186355-56 were used to amplify the penicillin G amidase
 CC gene Escherichia coli. The amplified fragment was used to construct the
 CC expression vector of the invention. This expression vector comprises the
 CC tac promoter, the groESL intergenic region of DNA and the start codon of
 CC the groEL gene. Expression of the groEL and/or groES proteins along with
 CC the expressed, heterologous protein of interest leads to stabilization of
 CC the expressed protein. The new vectors yield higher titers of expressed
 CC enzymes relative to prior art vectors such as T7 RNA polymerase-based pET
 CC vectors. Also, when constitutive promoters are used in the new vectors,

CC an inducer is not required to trigger expression of the heterologous
 CC protein. This may decrease the cost of the production of the protein and
 CC simplifies the fermentation process. The new vectors are used to obtain
 CC high yields of heterologous proteins expressed in microbial host cells,
 CC especially *Escherichia coli*. In particular, the new vectors are used to
 CC express the enzymes cephalosporin amidase or penicillin G amidase
 XX
 XX Sequence 20 BP; 10 A; 2 C; 4 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 5.8e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1433 CAGAGGATGCCATGAACAT 1452
 Db 1 CAGAGGATATCATGAAAAAT 20
 RESULT 333
 AAX60861/c
 ID AAX60861 standard; DNA; 20 BP.
 XX
 AC AAX60861;
 XX
 XX 09-AUG-1999 (first entry)
 DT
 XX
 XX CDK4 specific antisense oligo HVB103173.
 DE
 XX Cyclin-dependent kinase 4; CDK4; antisense; G1/S phase transition;
 KW cancerous cell; cyclin D1; P16; tumour growth; ss.
 XX
 OS Synthetic.
 XX
 XX WO9927087-A1.
 PN
 XX
 PD 03-JUN-1999.
 XX
 XX 21-NOV-1997; 97WO-US022234.
 PF
 XX 21-NOV-1997; 97WO-US022234.
 PR
 XX (HYBR-) HYBRIDON INC.
 XX
 PA Morrissey D, Von Hofe E;
 XX
 PI
 XX WPI; 1999-357832/30.
 DR
 XX Antisense oligonucleotide targeted to cyclin-dependent kinase 4 gene,
 PT useful for regulating G1 to S phase transition in a cell.
 PT
 XX Claim 3; Page 17; 60pp; English.
 PS
 XX Sequences AAX60831-864 represent synthetic oligonucleotides complementary
 CC to a cyclin-dependent kinase 4 (CDK4) nucleic acid. The antisense
 CC oligonucleotides are used to regulate G1/S phase transition, especially
 CC to inhibit growth of cancerous cells. The oligonucleotides can be
 CC administered in the form of a therapeutic composition to treat a mammal
 CC afflicted with a tumour associated with aberrant expression of CDK4,
 CC cyclin D1, or P16, to reduce tumour growth
 CC
 XX Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 5.8e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1086 GGTGGTACACTCTGGTACC 1105
 Db 20 GGTGTGTACACTCTGGTACC 1
 RESULT 334
 AAX27716

ID AAX27716 standard; DNA; 20 BP.
 XX
 AC AAX27716;
 XX
 DT 01-JUN-1999 (first entry)
 XX
 XX PCR primer hGH S2.1.
 DE
 XX Porcine; totipotent cell; pluripotent; primordial germ cell; PGC;
 KW porcine stem cell factor; transgenic pig; xenotransplantation; ES;
 KW cell differentiation; gene regulation; embryonic development; pSCF;
 KW embryonic stem cell; steel factor; PCR primer; ss.
 XX
 OS Synthetic.
 XX
 XX WO9909141-A1.
 PN
 XX 25-FEB-1999.
 PD
 XX 13-AUG-1998; 98WO-US016782.
 PF
 XX 14-AUG-1997; 97US-0055643P.
 PR
 XX (BIOT-) BIOTRANSPLANT INC.
 PA
 XX Brem G, Baetscher M;
 PI
 XX WPI; 1999-181024/15.
 DR
 XX Production of pluripotent or totipotent porcine stem cell lines - by long
 PT -term culture of transfected murine STO feeder cells with a porcine stem
 PT cell factor, useful for, e.g. xenotransplantation.
 PT
 XX Example 4; Page 34; 80pp; English.
 PS
 XX The invention relates to an isolated porcine totipotent cell. A porcine
 CC pluripotent or totipotent cell, can be produced by culturing either a
 CC porcine primordial germ cell (PGC) or other totipotent cell with a
 CC porcine stem cell factor (pSCF). Cell lines produced are useful for the
 CC generation of transgenic pigs, and for xenotransplantation. They are also
 CC useful for studying cell differentiation and gene regulation during
 CC embryonic development. The use of totipotent or pluripotent cells, like
 CC embryonic stem (ES) cells, in a totipotent-cell-embryo-injection-method
 CC enables specific gene alterations, which allow the study of specific gene
 CC function in a resulting chimeric animal line
 CC
 XX Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 5.8e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 424 ATGCGCAACGATCCCCACG 443
 Db 1 ATGCGCAACGATCCCCCAAG 20
 RESULT 335
 AAZ44825
 ID AAZ44825 standard; DNA; 20 BP.
 XX
 AC AAZ44825;
 XX
 XX 19-APR-2000 (first entry)
 DT
 XX Human FADD primer ISIS #101862.
 DE
 XX FADD; human; antisense; inhibitor; Fas-associated death domain; primer;
 KW probe; ss.
 KW
 XX Homo sapiens.
 OS
 XX US6015712-A.
 PN

XX 18-JAN-2000.
 XX
 XX 19-JUL-1999; 99US-00357072.
 XX
 XX 19-JUL-1999; 99US-00357072.
 PR
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Monia BP, Cowser LM, Baker BF, Zhang H;
 PI
 XX WPI; 2000-126316/11.
 DR
 XX Antisense oligonucleotides, useful for inhibiting human Fas-associated
 PT death domain (FADD) expression are targeted to the 3' untranslated region
 PT of the FADD gene.
 XX
 XX Claim 3; Col 69-70; 37pp; English.
 PS
 XX This invention describes novel antisense oligonucleotides (OGNs) (I) 8-20
 CC nucleotides in length that specifically hybridize with and inhibit
 CC nucleic acids encoding human Fas-associated death domain (FADD), targeted
 CC to the 3' untranslated region (3'UTR). (I) can be used to treat animals,
 CC especially humans, suspected of having or being prone to a disease or
 CC condition associated with FADD expression. AA244746-Z44831 represent
 CC primers and probes used in the method of the invention
 XX
 XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
 SQ

Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 5.8e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 46 GGACCAGCAGTGTGACTGCT 65
 Db 1 GGAGTAACAGTGTGACTGCT 20

RESULT 336
 AAC68207
 ID AAC68207 standard; DNA; 20 BP.
 XX
 XX AAC68207;
 AC
 DT 19-FEB-2001 (first entry)
 XX
 DE Gene typing PCR primer #2.
 XX
 XX Human leukocyte antigen; HLA; gene typing; infectious disease;
 KW autoimmune disease; inflammation; cancer; PCR primer; ss.
 KW
 XX Homo sapiens.
 OS
 XX CA2299675-Al.
 FN
 XX 12-SEP-2000.
 XX
 XX 10-MAR-2000; 2000CA-02299675.
 PF
 XX 12-MAR-1999; 99US-0124113P.
 XX
 XX (UYMA-) UNIV MANITOBA.
 PA
 XX Luo M, Brunham RC, Pan Y, Brunham K;
 PI
 XX WPI; 2000-679930/67.
 DR
 XX Typing polymorphic genes, useful to assess the association of alleles
 PT with diseases and in disease diagnosis, uses a taxonomy based sequence
 PT analysis in which a typing tree based on distinguishing sequences is
 PT constructed.
 XX
 XX Disclosure; Page 64; 125pp; English.
 PS

XX The present invention provides a novel method for typing genes,
 CC particularly human leukocyte antigen (HLA) coding sequences. The method
 CC uses DNA sequences and a taxonomy-based sequence analysis method to
 CC assign alleles for HLA-DQA1, HLA-DQB1 and HLA-DRB. These alleles have
 CC been linked to diseases such as diabetes, Iga deficiency, multiple
 CC sclerosis, cancer, clinical and immunological manifestations of HIV
 CC infection, coeliac disease, idiopathic nephrotic syndrome, immune
 CC responses to parasite antigens, pemphigus vulgaris, inflammatory bowel
 CC disease, rheumatoid arthritis, allergy and other inflammatory diseases
 XX
 XX Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
 SQ

Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 5.8e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1427 TCTCCGACAGGATGCCATG 1446
 Db 1 TCTCCGACAGGATTTCTTG 20

RESULT 337
 AAC79506/c
 ID AAC79506 standard; DNA; 20 BP.
 XX
 XX AAC79506;
 AC
 XX 07-FEB-2001 (first entry)
 DT
 XX Human p38beta antisense oligonucleotide SEQ ID 29.
 DE
 XX Antisense oligonucleotide; p38 mitogen activated protein kinase; MAPK;
 KW antiarthritis; immunosuppressive; cardiant; heart disease;
 KW antiinflammatory; autoimmune disease; rheumatoid arthritis; apoptosis;
 KW phosphorothioate; ss.
 KW
 XX Homo sapiens.
 OS
 XX WO200059919-Al.
 FN
 XX 12-OCT-2000.
 PD
 XX 04-APR-2000; 2000WO-US008794.
 PF
 XX 06-APR-1999; 99US-00286904.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Monia BP, Gaarde WA, Nero PS, McKay R, Popoff I;
 PI
 XX WPI; 2000-664982/64.
 DR
 XX Antisense compound targeted to p38 mitogen activated protein kinase
 PT inhibits protein kinase and is useful for diagnosing and treating
 PT inflammatory, autoimmune and heart disease.
 PT
 XX Example 3; Page 43; 90pp; English.
 PS

This invention relates to antisense compounds 8-30 nucleobases in length
 CC targeted to the 5'-untranslated region, translational start site,
 CC translational termination region or 3'-untranslated region of a nucleic
 CC acid encoding a p38 mitogen activated protein kinase (MAPK), where the
 CC antisense oligonucleotides inhibit the expression of MAPK. Sequences
 CC AAC79480 and AAC79501 represent human p38alpha MAPK and p38beta MAPK cDNA
 CC sequences. AAC79481 - AAC79500 and AAC79553 - AAC79570 represent human
 CC p38alpha antisense oligonucleotides, while AAC79502 - AAC79521 and
 CC AAC79571 - AAC79580 represent human p38beta antisense oligonucleotides.
 CC Also included in the invention are a p38alpha cDNA sequence AAC79523 and
 CC antisense oligonucleotides AAC79523 - AAC79536 isolated from rat tissue.
 CC Murine p38beta MAPK cDNA is represented in AAC79537 and antisense
 CC oligonucleotides targeting the sequence are given in AAC79538 - AAC79552.
 CC The antisense oligonucleotides have antirheumatic; antiarthritis;

CC immunosuppressive; cardiant and antiinflammatory activity. The antisense
 CC oligonucleotides are useful for inhibiting the expression of p38 MAPK in
 CC cells or tissues. The oligonucleotides are used for treating an animal
 CC with diseases such as inflammatory or autoimmune diseases e.g. rheumatoid
 CC arthritis, or heart disease. The oligonucleotides are also useful for
 CC inhibiting inflammation or apoptosis

XX Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 5.8e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 764 TGCTCAAGCAGCTCAACAC 783
 DB 20 TGCTCAAGCAGCTCAAGCAC 1

RESULT 338
 ABZ80677/C
 ID ABZ80677 standard; DNA; 20 BP.

XX AC ABZ80677;

XX DT 13-JUN-2003 (first entry)

XX DE Beagle dog ob gene PCR amplification primer OBREV.

XX ss; dog; canine; obese gene; leptin; PCR; primer; amplification.

XX OS Canis familiaris.

XX FN JP2000279171-A.

XX PD 10-OCT-2000.

XX PF 30-MAR-1999; 99JP-00088295.

XX PR 30-MAR-1999; 99JP-00088295.

XX PA (MOMI) MORINAGA & CO LTD.

XX DR WPI; 2001-027452/04.

XX PT A canine obese gene, its gene product, its preparation, its measuring
 XX reagent and measurement.

XX PS Example 1; Page 8; 18pp; Japanese.

XX CC The invention relates to the isolation of a canine Ob gene (obese gene)
 CC especially from beagle dogs. The gene is isolated from a dog DNA library
 CC using primers ABZ80676-ABZ80690. This sequence represents a PCR primer
 CC used to isolates the gene encoding the Ob protein. The invention also
 CC includes a vector comprising the DNA and a host cell transformed with the
 CC vector. The sequence is used for the large scale preparation of canine
 CC leptin

XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 5.8e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1075 TACTCCATGAGGTGGTGAC 1094
 DB 20 TACTCCACAGAGGTGGTGC 1

RESULT 339
 AAC91033/C
 ID AAC91033 standard; DNA; 20 BP.
 XX AAC91033;
 AC

XX 15-MAR-2001 (first entry)
 DT Primer MUC5B reverse.
 DE Immortal cell line; middle ear epithelial; hearing disorder;
 XX otitis media; primer; ss.
 KW Unidentified.

XX WO200073419-A1.

XX PD 07-DEC-2000.

XX PF 26-MAY-2000; 2000WO-US014751.

XX PR 28-MAY-1999; 99US-0136736P.

XX PA (HOUS-) HOUSE EAR INST.

XX PI Lim DJ, Chun Y, Rhim JS;

XX DR WPI; 2001-041148/05.

XX PT New immortalized non-tumorigenic human middle ear epithelial cell line
 PT useful for studying gene and protein expression in otitis media, and for
 PT identifying chemical and biological agents for treating otitis media.

XX PS Example 11; Page 30; 53pp; English.

XX CC The present invention relates to a substantially pure cell line of
 CC immortalized non-tumorigenic human middle ear epithelial cells, which
 CC express an exogenous immortalizing gene. The cell line is useful for
 CC studying the molecular mechanisms involved in the pathogenesis that
 CC results in hearing disorders, e.g. hearing loss or otitis media. The cell
 CC lines are also useful for studying the normal cell biology of human
 CC middle ear epithelial cells. The cell lines can also be used as a
 CC screening tool for identifying agents that may be useful in therapy

XX Sequence 20 BP; 2 A; 5 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 5.8e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1326 CAAGTACCGCGCGAGGCC 1345
 DB 20 CAAGTACTCAGCAGAGGCC 1

RESULT 340
 AAF87532
 ID AAF87532 standard; DNA; 20 BP.

XX AC AAF87532;

XX DT 10-JUL-2001 (first entry)

XX DE Human-specific globin primer #3.

XX Human; globin; neuroprotective; nootropic; antiparkinsonian;
 XX antileptic; antiarteriosclerotic; antidiabetic; dermatological;
 KW antiinflammatory; antiulcer; vulnery; immunosuppressive; cell therapy;
 KW non-haematopoietic lineage cell; vascular disorder; arteriosclerosis;
 KW skin disorder; PCR primer; ss.

XX OS Homo sapiens.

XX WO200121766-A2.

XX PD 29-MAR-2001.

XX PF 22-SEP-2000; 2000WO-US026020.

```

XX 23-SEP-1999; 99US-0156031P.
PR 10-JUL-2000; 2000US-0217438P.
XX (CELL-) CELL SCI THERAPEUTICS.
XX
PI Pykett MJ, Rosenzweig M, Banu N;
XX WPI; 2001-281603/29.
XX
XX Producing non-hematopoietic lineage cells from hematopoietic progenitor
PT cells for use in tissue repair, transplantation, involves culturing the
PT progenitor cells under environment that promotes cell differentiation.
XX Example 2; Page 32; 42pp; English.
XX
XX The present sequence is a PCR primer which was used to amplify human
CC globin DNA in an example illustrating an invention relating to a method
CC for obtaining non-hematopoietic lineage cells from haematopoietic
CC progenitor cells (HPCs). The non-hematopoietic lineage cells are useful
CC in the therapeutic treatment of various pathological conditions such as
CC tissue repair, tissue transplantation and tissue reimplantation. They
CC are useful for treating neurodegenerative disorders such as Alzheimer's
CC disease, multiple sclerosis and Parkinson's disease, and vascular
CC disorders such as arteriosclerosis, coronary artery disease, aortic
CC aneurysm and arterial diseases of the lower extremities. The cells may be
CC used in the treatment of other diseases associated with early
CC arteriosclerosis including diabetes mellitus, hypertension, familial
CC hypercholesterolaemia and familial combined hyperlipidaemia. They may
CC also be used to treat disorders of the skin, such as eczema and
CC psoriasis. The present sequence was used in an assay to demonstrate in
CC vivo homing of human non-hematopoietic lineage cells to the brain of
CC transplanted mice. PCR specific for human globin was performed with brain
CC and muscle cells of the transplanted and nontransplanted mice. A PCR
CC product was detected only in the brain cells, indicating that the human
CC cells were only present in the brain
XX
SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1627 GCGCCCGCAGCGAGCGGCT 1646
Db 1 GTCACCACAGCGCAGTGCT 20
RESULT 341
AAAF27086
ID AA27086 standard; DNA; 20 BP.
XX
XX AA27086;
AC
XX
XX 06-APR-2001 (first entry)
DT
XX
XX Human MEK1 phosphorothioate antisense oligonucleotide, SEQ ID NO:8.
DE
XX
XX Human MEK1; mitogen-activated protein kinase kinase 1;
KW MEK kinase 1; MAP/ERK kinase kinase 1; pro-apoptotic;
KW apoptosis signal regulation; programmed cell death;
KW serine/threonine kinase; MAP kinase cascade; JNK/SAPK;
KW Jun N-terminal kinase/stress-activated protein kinase; Bcl-2 substrate;
KW NF-kappa-B-mediated transcription regulation; expression inhibition;
KW anticense; hyperproliferative disorder; cancer; inflammation;
KW phosphorothioate; ss.
XX
XX Homo sapiens.
OS
XX US6168950-B1.
XX
XX 02-JAN-2001.
PD
XX

```

```

PF 23-JUL-1999; 99US-00359756.
XX
XX 23-JUL-1999; 99US-00359756.
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Cowsert LM, Gaarde W, Ward DT;
XX WPI; 2001-122264/13.
XX
XX New antisense compound targeting nucleic acid encoding human mitogen-
PT activated protein kinase 1 (MEKK1), useful for treating diseases
PT or conditions associated with MEKK1 expression, or preventing
PT inflammation or tumor formation.
XX
XX Claim 14; Col 39; 35pp; English.
XX
XX Sequences AAF27086-AAF27125 represent phosphorothioate antisense
CC oligonucleotides targetted to the human MEKK1 gene, which inhibit its
CC expression. The antisense oligonucleotides were designed to target
CC different regions of the human MEKK1 RNA, and were analysed for their
CC effect on MEKK1 mRNA levels by quantitative real-time PCR. MEKK1 (also
CC known as mitogen-activated protein kinase kinase 1, MEK kinase 1
CC and MAP/ERK kinase kinase 1) is a dual-specific serine/threonine kinase
CC which mediates cellular responses to mitogenic stimuli, being involved in
CC JNK/SAPK (Jun N-terminal kinase/stress-activated protein kinase) MAP
CC kinase cascades. MEKK1 regulates signalling events associated with
CC apoptosis (programmed cell death) and NF-kappa-B, both of which have been
CC associated with the development of hyperproliferative disorders such as
CC cancer. Specifically, MEKK1 lies directly downstream of Bcl-2 in an
CC apoptotic signalling cascade, and plays a critical role in the control of
CC NF-kappa-B-mediated transcription at multiple points in the apoptotic
CC cascade. The oligonucleotides of the invention are useful for diagnosis,
CC prevention and treatment of conditions associated with MEKK1 expression,
CC such as inflammation, and cancer and other hyperproliferative disorders
XX
SQ Sequence 20 BP; 0 A; 12 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 552 GCCCTCAGCGCGCGCTCC 571
Db 1 GCTCTCTCGCGCGCGCTGC 20
RESULT 342
AAD36658
ID AAD36658 standard; DNA; 20 BP.
XX
XX AAD36658;
AC
XX
XX 09-AUG-2002 (first entry)
DT
XX
XX Human Her-1 antisense oligonucleotide ISIS #128532.
DE
XX
XX Human; epidermal growth factor receptor; hyperproliferative disease;
KW Her1; antisense; prophylaxis; psoriasis; phosphorothioate backbone;
KW tumour; cancer; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2' methoxyethyl nucleotides"

```

```

FT modified_base 5 /*tag= d /mod_base= m5c
FT
FT modified_base 6 /*tag= e /mod_base= m5c
FT
FT modified_base 8 /*tag= f /mod_base= m5c
FT
FT modified_base 9 /*tag= g /mod_base= m5c
FT
FT modified_base 12 /*tag= h /mod_base= m5c
FT
FT modified_base 16 /*tag= c /mod_base= OTHER
FT
FT /*note= "2'methoxyethyl nucleotides"
XX
XX WO200226758-A1.
PN
XX
XX 04-APR-2002.
XX
XX 28-SEP-2001; 2001WO-US030551.
XX
XX 29-SEP-2000; 2000US-00676610.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Wyatt JR, Freier SM;
XX
XX WPI; 2002-394234/42.
XX
XX Novel antisense oligonucleotide that specifically hybridizes with and
XX inhibits nucleic acid encoding epidermal growth factor receptor, useful
XX for treating hyperproliferative disease such as cancer or psoriasis.
XX
XX Claim 1; Page 47; 169pp; English.
XX
XX The invention relates to an antisense oligonucleotide targetted to a
XX nucleic acid molecule encoding human epidermal growth factor receptor
XX (Her1) to inhibit its expression. The antisense compounds are useful for
XX treating diseases or conditions associated with Her-1 such as
XX hyperproliferative diseases especially cancer (lung, ovarian, colon or
XX prostate cancer) and psoriasis. They are also useful as research
XX reagents, diagnostics, therapeutics, kits and prophylactically e.g. to
XX prevent or delay tumour formation. The present sequence is an antisense
XX oligonucleotide targetted to human Her-1
XX
XX Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 950 ACTGCCACCGCGCAGAGGTG 969
DB 1 AATGCCACCGCGCAGAGGTG 20
|||||
RESULT 343
AAL48714
ID AAL48714 standard; DNA; 20 BP.
XX
XX AAL48714;
AC
XX
XX 15-OCT-2002 (first entry)
DT
XX
XX Chimeric beta-glucuronidase enzyme PCR primer SEQ ID NO: 40.
DE
XX
XX Plant; mismatch repair; chemical inhibitor; hypermutable; PCR; primer;
KW ss.
KW

```

```

XX Unidentified.
OS Unidentified.
OS Chimeric.
XX WO200254856-A1.
PN
XX 18-JUL-2002.
PD
XX
XX 15-JAN-2001; 2001WO-US000934.
PF
XX
XX 15-JAN-2001; 2001WO-US000934.
PR
XX (MORP-) MORPHOTEK INC.
XX
XX Nicolaides NC, Grasso L, Sass PM;
PI
XX WPI; 2002-599624/64.
DR
XX
XX Making hypermutable cell for agricultural, pharmaceutical or
XX environmental applications, by exposing cell to mismatch repair inhibitor
XX such as anthracene, ATPase inhibitor, nuclease inhibitor or polymerase
XX inhibitor.
XX
XX Example 6; Page 111; 114pp; English.
XX
XX The present invention relates to a method of making a hypermutable cell,
XX involving exposing a cell to a chemical inhibitor of mismatch repair. The
XX method is useful for making a hypermutable cell, in particular a plant
XX cell, and for creating genetically altered host cells or organisms for
XX agricultural, chemical manufacturing, pharmaceutical and environmental
XX applications. The present sequence is a PCR primer used to sequence a
XX chimeric beta-glucuronidase reporter enzyme coding sequence for use in
XX the exemplification of the invention
XX
XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 1723 CATGTTCACTGCCCACTTG 1742
DB 1 CATGTTCACTGCCCACTCG 20
|||||
RESULT 344
AAD39520/c
ID AAD39520 standard; DNA; 20 BP.
XX
XX AAD39520;
AC
XX
XX 04-OCT-2002 (first entry)
DT
XX
XX Human calreticulin antisense oligonucleotide, ISIS 109313.
DE
XX
XX Human; calreticulin; antisense compound; hyperproliferative disorder;
XX cancer; autoimmune disease; viral infection; cardiovascular disease;
XX antisense therapy; cytostatic; immunosuppressive; virucide; antisense;
XX phosphorothioate backbone; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
OS
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT

```



```
FT modified_base 6..20
FT FT /*tag= c
FT FT /*mod_base= OTHER
FT modified_base 13
FT FT /*tag= d
FT FT /*mod_base= m5c
XX
XX WO200236743-A2.
XX
XX 10-MAY-2002.
XX
XX 30-OCT-2001; 2001WO-US049045.
XX
XX 30-OCT-2000; 2000US-00702327.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Cowsett LM;
XX WPI; 2002-479759/51.
XX
XX Novel antisense compound targeted to nucleic acid encoding calreticulin,
XX useful for treating a human having disease or condition associated with
XX calreticulin e.g. cancer, viral infection, autoimmune disease.
XX
XX Claim 3; Page 82; 109pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of calreticulin. The compositions comprise
XX antisense compounds, particularly antisense oligonucleotides, targeted
XX to nucleic acids encoding calreticulin. The antisense compound is useful
XX for inhibiting the expression of calreticulin in human cells or tissues.
XX It is also useful for treating a human having a disease or condition
XX associated with calreticulin, e.g., hyperproliferative disorder e.g.
XX cancer, autoimmune disease, viral infection or cardiovascular disease, by
XX inhibiting expression of calreticulin. It is useful for diagnostics,
XX therapeutics, prophylaxis and as research reagents and kits. It is also
XX used in antisense therapy. The present sequence is an antisense compound
XX targeted to human calreticulin. This sequence is used to study the
XX antisense inhibition of calreticulin expression-phosphorothioate 2'-MOE
XX gapmer oligonucleotides
XX
XX Sequence 20 BP; 7 A; 1 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 5.8e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 540 CATCTTTGACAAAGCCCTCTCA 559
Db 20 CATCTTTGACAACTTCTCTCA 1
RESULT 345
ABK50599/c
ID ABK50599 standard; DNA; 20 BP.
XX
XX AC ABK50599;
XX
XX 30-JUL-2002 (first entry)
XX
XX FAM modified probe #4.
XX
XX Method for screening genomic DNA; target sequence; transgenic screening;
XX organism identification; targeted mutagenesis screening method; mouse;
XX probe; ss.
XX
XX OS Mus sp.
XX
XX WO200220842-A1.
XX
XX 14-MAR-2002.
```

```
XX
XX 04-SEP-2001; 2001WO-US027404.
XX
XX 06-SEP-2000; 2000US-0230371P.
XX
XX 04-SEP-2001; 2001US-00230371.
XX
XX (HODG/) HODGE T A.
XX
XX Hodge TA;
XX
XX WPI; 2002-371884/40.
XX
XX Detecting designated genetic sequence in genomic DNA sample, comprises
XX depositing genomic DNA on substrate, adding labeled probe specific for
XX portion of DNA and detecting signal from labeled probe.
XX
XX Example 4; Page 62; 126pp; English.
XX
XX The present invention relates to a method and apparatus for transgenic
XX and targeted mutagenesis screening of genomic DNA. The method comprises
XX depositing genomic DNA on a substrate, adding at least one labelled probe
XX specific for a portion of the genomic DNA, and detecting the signal from
XX the probe. The invention also provides a system for screening DNA for a
XX designated genetic sequence, the system includes a computer having a
XX processor, memory, web browser and an automatic screening device that
XX analyses samples of genomic DNA for the designated sequence. The method
XX is useful for detecting a designated genetic sequence in a sample of
XX genomic DNA. The method is useful for rapid identification of an
XX organism, whose genome possesses specific genetic sequences that exist
XX endogenously or has been modified, mutated or genetically engineered. The
XX method is more accurate, faster and is a high volume transgenic and
XX targeted mutagenesis screening method. The screening results are provided
XX to a researcher more quickly than by the prior art methods. The present
XX sequence represents a Fam modified probe used in the methods of the
XX present invention
XX
XX Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 5.8e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 1593 CGTGTGTGCACACCGAGTTCT 1612
Db 20 CGTGTGTGCACACCGAGTTAT 1
RESULT 346
ABK50568/c
ID ABK50568 standard; DNA; 20 BP.
XX
XX AC ABK50568;
XX
XX 30-JUL-2002 (first entry)
XX
XX Mouse genomic DNA marker #4.
XX
XX Method for screening genomic DNA; target sequence; transgenic screening;
XX organism identification; targeted mutagenesis screening method; mouse;
XX DNA marker; ds.
XX
XX OS Mus sp.
XX
XX WO200220842-A1.
XX
XX 14-MAR-2002.
XX
XX 04-SEP-2001; 2001WO-US027404.
XX
XX 06-SEP-2000; 2000US-0230371P.
XX
XX 04-SEP-2001; 2001US-00230371.
XX
XX (HODG/) HODGE T A.
```

```
XX Hodge TA;
PI
XX
XX WPI; 2002-371884/40.
XX
XX Detecting designated genetic sequence in genomic DNA sample, comprises
XX depositing genomic DNA on substrate, adding labeled probe specific for
XX portion of DNA and detecting signal from labeled probe.
XX
XX Claim 9; Page 41; 126pp; English.
XX
XX The present invention relates to a method and apparatus for transgenic
XX and targeted mutagenesis screening of genomic DNA. The method comprises
XX depositing genomic DNA on a substrate, adding at least one labelled probe
XX specific for a portion of the genomic DNA, and detecting the signal from
XX the probe. The invention also provides a system for screening DNA for a
XX designated genetic sequence. The system includes a computer having a
XX processor, memory, web browser and an automatic screening device that
XX analyses samples of genomic DNA for the designated sequence. The method
XX is useful for detecting a designated genetic sequence in a sample of
XX genomic DNA. The method is useful for rapid identification of an
XX organism, whose genome possesses specific genetic sequences that exist
XX endogenously or has been modified, mutated or genetically engineered. The
XX method is more accurate, faster and is a high volume transgenic and
XX targeted mutagenesis screening method. The screening results are provided
XX to a researcher more quickly than by the prior art methods. The present
XX sequence represents a mouse genomic DNA marker used in the methods of the
XX present invention
XX
XX Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 5.8e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1593 CGTGGTGGACACCGAGTTCT 1612
XX ||||| ||||| |||||
XX 20 CGTGGTGGACACCGTGTAT 1
XX
XX RESULT 347
XX ABS68931/c
XX ID ABS68931 standard; DNA; 20 BP.
XX
XX AC ABS68931;
XX
XX DT 20-NOV-2002 (first entry)
XX
XX DE Human RecQ protein-like 4 (RECQL4) DNA antisense oligonucleotide #74.
XX
XX KW Human; RecQ protein-like 4; RECQL4; ss; chromosome 8q24; infection;
XX inflammation; tumour formation; cancer; cytostatic; antineoplastic;
XX antimicrobial; antisense therapy; antisense oligonucleotide.
XX
XX OS Homo sapiens.
XX
XX PN US6436706-B1.
XX
XX PD 20-AUG-2002.
XX
XX PF 23-FEB-2001; 2001US-00792594.
XX
XX PR 23-FEB-2001; 2001US-00792594.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX PA Ward DT, Watt AT;
XX
XX PI WPI; 2002-689941/74.
XX
XX New antisense compounds targeted to nucleic acids encoding RecQ protein-
XX like 4, useful for modulating expression of the nucleic acid and treating
XX diseases associated with expression of the nucleic acid in humans.
XX
XX Claim 14; Col 46; 45pp; English.
XX
XX The invention relates to a compound targeted to specific nucleobases of
XX RecQ protein-like 4 (RECQL4) and which hybridises and inhibits the
XX expression of RECQL4. The compound is useful for inhibiting the
XX expression of RECQL4 in cells or tissues and for treating an animal,
XX particularly a human suspected of having or being prone to a disease or
XX condition associated with expression of RECQL4. The compound is useful
XX for diagnostics, therapeutics and as a research reagent, e.g.
XX prophylactically to prevent or delay infection, inflammation or tumour
XX formation. This sequence represents an antisense oligonucleotide used in
XX inhibition of human RECQL4 expression
XX
XX Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 5.8e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1160 GGGGTGTGGCTGCATCTTC 1179
XX ||||| ||||| |||||
XX 20 GGGCTGTGGCCGCATCTTC 1
XX
XX RESULT 348
XX ADG34588/c
XX ID ADG34588 standard; DNA; 20 BP.
XX
XX AC ADG34588;
XX
XX DT 26-FEB-2004 (first entry)
XX
XX DE Phosphorothioate oligonucleotide calreticulin inhibitor SEQ ID NO:54.
XX
XX KW ss; human; antisense compound; calreticulin; cytostatic; cardiant;
XX virucide; osteopathic; antiparasitic; antisense gene therapy; melanoma;
XX viral warts; rubella; schistosomiasis; congenital heart block;
XX osteoporosis.
XX
XX OS Synthetic.
XX
XX PN WO200268688-A1.
XX
XX PD 06-SEP-2002.
XX
XX PF 30-OCT-2001; 2001WO-US049485.
XX
XX PR 22-FEB-2001; 2001US-00791406.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX (BOEH ) BOEHRINGER INGELHEIM PHARM INC.
XX
XX Bennett CF, Rothlein R, Kishimoto TK, Cowsett LM;
XX
XX WPI; 2002-750420/81.
XX
XX New antisense compound that specifically hybridizes with and inhibits the
XX expression of human calreticulin, useful for treating diseases e.g.
XX osteoporosis or schistosomiasis.
XX
XX Example 15; SEQ ID NO 54; 110pp; English.
XX
XX The invention relates to a novel antisense compound, which is 8-10
XX nucleotides in length targeted to a nucleic acid molecule encoding human
XX calreticulin, and specifically hybridises with and inhibits the
XX expression of human calreticulin. A compound of the invention has
XX cytostatic, cardiant, virucide, osteopathic, and antiparasitic activity,
XX and may act as a calreticulin-inhibitor, and have a use in antisense gene
XX therapy. The antisense compound is useful for treating a disease or
XX condition associated with calreticulin e.g. melanoma, viral warts,
XX rubella, schistosomiasis, congenital heart block or osteoporosis.
XX Further, it is useful as prophylaxis, research reagent and diagnostic.
```

CC The present sequence is used in the exemplification of the invention. The
 CC sequence is a phosphorothioate oligonucleotide, having 2'-MOE wings and a
 CC deoxy gap.

SQ Sequence 20 BP; 7 A; 1 C; 7 G; 5 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.9%; Score 15.2; DB 1; Length 20;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 540 CATCTTTGACACGCCCTCA 559

DB 20 CATCTTTGACACCTTCTCA 1

RESULT 349

ABX78105/c

ID ABX78105 standard; DNA; 20 BP.

AC ABX78105;

DT 16-APR-2003 (first entry)

DE Human p38-beta MAPK oligonucleotide ISIS NO 17895.

XX p38 mitogen-activated protein kinase; p38 MAPK; phosphorothioate;
 KW antisense; antiarthritic; antiinflammatory; kinase inhibitor; human;
 KW inflammatory disease; rheumatoid arthritis; gene therapy; ss.

OS Homo sapiens.

XX FH

Key Location/Qualifiers

modified_base

1..20

/tag= a

/mod_base= OTHER

/note= "phosphorothioate backbone, nucleotides 1-6 and 15
 -20 are 2'-methoxyethoxy (MOE) nucleotides, nucleotides 7
 -14 are 2'-deoxy- nucleotides, all C nucleotides are 5-
 methyl cytosines"

XX US6448079-B1.

PD 10-SEP-2002.

XX 15-AUG-2000; 2000US-00640101.

XX 06-APR-1999; 99US-00286904.

XX (ISIS-) ISIS PHARM INC.

XX Monia BP, Gaarde WA, Nero P, McKay R;

XX WPI; 2003-089122/08.

XX New antisense compound, useful for preparing a composition for
 PT diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid
 PT arthritis.

PS Example 3; Col 23-24; 44pp; English.

XX This invention describes a novel antisense compound, which is 8-30
 CC nucleobases in length targeted to a nucleic acid molecule encoding p38
 CC mitogen-activated protein kinase (MAPK). The products of the invention
 CC have antiarthritic and antiinflammatory activity, can act as act as
 CC kinase inhibitors. The antisense compound is useful for preparing a
 CC composition for diagnosing, treating or preventing inflammatory diseases,
 CC e.g. rheumatoid arthritis or for use in antisense gene therapy. This
 CC sequence represents an antisense oligonucleotide used in a method to
 CC inhibit p38 MAPK

XX Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match

0.9%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 5.8e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 764 TGCTCAAGGACCTCAACAC 783

DB 20 TGCTCAAGCACCTGAAGCAC 1

RESULT 350

ABZ59542/c

ID ABZ59542 standard; DNA; 20 BP.

XX AC

ABZ59542;

XX 17-APR-2003 (first entry)

DE Mouse src-c chimeric phosphorothioate oligonucleotide SEQ ID NO:163.

XX Mouse; src-c; tyrosine kinase; src-c inhibitor; cytostatic; osteopathic;
 KW antiinflammatory; antibacterial; antisense therapy; vaccine; cancer;
 KW antisense oligonucleotide; aberrant bone remodeling; breast cancer;
 KW hyperproliferative disorder; pancreatic cancer; lung cancer; tumour;
 KW ovarian cancer; oesophageal cancer; neuroblastoma; retinoblastoma;
 KW Kaposi's sarcoma; infection; inflammation; tumour formation;
 KW phosphorothioate; ss.

XX OS Mus musculus.

OS Synthetic.

XX FH

Key Location/Qualifiers

modified_base

1..20

/tag= b

/mod_base= OTHER

/note= "phosphorothioate linkages"

modified_base

1..5

/tag= a

/mod_base= OTHER

/note= "2'-O-methoxyethyl gapmer (2'-MOE wing)"

modified_base

16..20

/tag= c

/mod_base= OTHER

/note= "2'-O-methoxyethyl gapmer (2'-MOE wing)"

XX WO200295053-A2.

XX 28-NOV-2002.

XX 16-MAY-2002; 2002WO-US015684.

XX 18-MAY-2001; 2001US-00860473.

XX (ISIS-) ISIS PHARM INC.

XX Bennett FC, Watt AT;

XX WPI; 2003-120806/11.

XX New antisense oligonucleotides targeted to nucleic acids encoding src-c,
 PT useful for diagnosing, treating or preventing diseases associated with
 PT the expression of src-c, e.g. cancer or inflammation, and in research
 PT applications.

PS Claim 3; Page 93; 137pp; English.

XX The present invention describes a compound (I) that is 8-50 nucleobases
 CC in length targeted to a nucleic acid molecule encoding a 5'UTR, 3'UTR,
 CC coding region, intron region, exon region, stop codon, intron:exon
 CC junction, exon:exon junction, or 5' mRNA variant of src-c, and which
 CC specifically hybridises with and inhibits the expression of src-c. (I)
 CC have cytostatic, antiinflammatory, osteopathic and antibacterial
 CC activities, and can be used in antisense therapy and in vaccines. The
 CC antisense compounds (I) can be used for modulating the expression of src-
 CC c and for treating diseases or conditions associated with expression of

CC src-c, e.g. aberrant bone remodeling or hyperproliferative disorders,
CC particularly cancer, such as breast cancer, pancreatic cancer, lung
CC cancer, ovarian cancer, oesophageal cancer, neuroblastoma, retinoblastoma
CC or Kaposi's sarcoma. (i) are also useful for diagnostics, therapeutics,
CC prophylaxis, e.g. to prevent or delay infection, inflammation or tumour
CC formation, as research reagents and kits, and in distinguishing between
CC functions of various members of a biological pathway. The present
CC sequence represents a mouse src-c antisense chimeric phosphorothioate
CC oligonucleotide, which is used in an example from the present invention
XX
XX
SQ Sequence 20 BP; 6 A; 8 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCCCTGGCC 1047
|||||
Db 20 TGGCCGACTTTGGGTTGGCC 1

RESULT 351
AAD52909/c
ID AAD52909 standard; DNA; 20 BP.
XX
AC AAD52909;
XX
DT 14-MAY-2003 (first entry)
XX
DE Human TTVH2 intron C amplifying reverse PCR primer.
XX
XX Human; tweety homologue 2; TTVH2; therapy; cancer; tumour; cytostatic;
KW diagnostic marker; PCR; primer; ss.
XX
OS Homo sapiens.
XX
XX WO200292629-A1.
XX
PD 21-NOV-2002.
XX
PF 14-MAY-2002; 2002WO-AU000591.
XX
PR 14-MAY-2001; 2001AU-00004971.
XX
PA (UYQU-) UNIV QUEENSLAND TECHNOLOGY.
XX
XX Clements JA;
XX
XX WPI; 2003-129264/12.
XX
XX New human tweety homolog 2 polypeptides and polynucleotides, useful for
PT producing an antigen-binding molecule that is immuno-interactive with the
PT polypeptide or as diagnostic markers for cancers.
XX
XX Example 4; Page 92; 176pp; English.
XX
XX The invention relates to human tweety homologue 2 (TTYH2) polypeptide and
CC polynucleotide sequence. TTYH2 is useful for producing an antigen-binding
CC molecule that is immuno-interactive with the polypeptide. The agent is
CC useful for manufacturing a medicament for restoring a normal level and/or
CC functional activity of TTYH2 expression in a patient, and for treating or
CC preventing cancer or tumour. TTYH2 sequences may also be used to provide
CC both drug targets and regulators to promote or inhibit one or more
CC activities, and to provide diagnostic markers for cancers. The present
CC sequence is a PCR primer used for amplifying human TTYH2 gene intron
XX
XX
SQ Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 858 GGACCTGAAGCAGTACCTGG 877

Db 20 GGACCTAGAGCAGCACCTGG 1
|||||
RESULT 352
ACF04494/c
ID ACF04494 standard; DNA; 20 BP.
XX
AC ACF04494;
XX
DT 04-DEC-2003 (first entry)
XX
DE Real time PCR targeting IL-1ra PCR primer F43.
XX
KW Nucleic acid level determination; PCR; primer; probe; DNA quantification;
KW gene therapy; immunosuppressive; anti-HIV; antiarthritic;
KW neuroprotective; cytostatic; antiallergic; ss.
XX
OS Unidentified.
XX
XX WO2003060119-A2.
XX
PD 24-JUL-2003.
XX
PF 20-JAN-2003; 2003WO-EP000493.
XX
PR 18-JAN-2002; 2002EP-00447009.
XX
PA (ULBR) UNIV LIBRE BRUXELLES.
XX
XX Stordeur P, Goldman M;
XX WPI; 2003-598531/56.
XX
XX Quantifying in vivo RNA from a biological sample for producing a
PT medicament for treating immune related disease by determining in vivo
PT levels of transcripts using nucleic acid/reverse transcription-PCR
PT reagent mix in an automated setup.
XX
XX Disclosure; Page 44; 83pp; English.
XX
XX The present invention relates to a method of quantifying in vivo RNA from
CC a biological sample. This involves collecting the biological sample in a
CC tube comprising a compound inhibiting RNA degradation and/or gene
CC induction, forming a precipitate comprising nucleic acids, separating the
CC precipitate from the supernatant, dissolving the precipitate using a
CC buffer, forming a suspension, isolating nucleic acids from the suspension
CC using an automated device, dispersing or distributing a reagent mix for
CC reverse transcription (RT)-PCR using an automated device, dispersing or
CC distributing the nucleic acids isolated within the dispersed reagent mix
CC using an automated device and determining the in vivo levels of
CC transcripts using the nucleic acid and RT-PCR reagent mix of the previous
CC step in an automated setup. The method is useful for monitoring or
CC detecting changes in in vivo nucleic acids levels in a biological agent
CC present, such as eukaryotic or prokaryotic cells, viruses or phages in a
CC biological sample or for producing a medicament for treating immune
CC related disease, e.g., autoimmunity, rheumatoid arthritis, multiple
CC sclerosis, cancer, immunodeficiencies such as AIDS, allergy, graft
CC rejection or Graft versus Host Disease. The present sequence is a PCR
CC primer/probe used in the exemplification of the invention
XX
SQ Sequence 20 BP; 1 A; 9 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 713 GACTGGAACATGAAGAGGGG 732
|||||
Db 20 GAATGGAACAGGAGAGGAG 1
|||||
RESULT 353

ADB79146/c
ID ADB79146 standard; DNA; 20 BP.
XX AC ADB79146;
XX DT 04-DEC-2003 (first entry)
XX XX
DE Matrix metalloproteinase 1 antisense oligonucleotide, SEQ ID No 60.
XX antisense; modulating; expression; matrix metalloproteinase 1; MMP1;
KW hyperproliferative disorder; cancer; inflammatory disorder;
KW atherosclerosis; MMP1 inhibitor; cytostatic; antiinflammatory;
KW antiarteriosclerotic; ss; human.
XX Synthetic.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod base
FT /note= "OTHER= Nucleotides 1-5 and 15-20 are 2'-O-
FT methoxyethyl's (2-MOE)'s separated by a gap region of 2'-
FT deoxynucleotides. Nucleotides 1-20 have a
FT phosphorothioate backbone. All cytidine residues are 5-
FT methylcytidines"
XX
PN WO2003033659-A2.
XX
XX 24-APR-2003.
XX
XX 15-OCT-2002; 2002WO-US032940.
XX
XX 17-OCT-2001; 2001US-00035485.
XX
XX (ISIS-) ISIS PHARM INC.
XX Baker BF, Cowser LM;
XX WPI; 2003-393515/37.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding matrix metalloproteinase 1 (MMP1), useful for
PT treating a disease/condition associated with MMP1, such as
PT hyperproliferative disorder.
XX
XX Claim 3; Page 74; 99pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC used for modulating the expression of matrix metalloproteinase 1 (MMP1).
CC Specifically claimed, are antisense oligonucleotides capable of
CC modulating the expression of MMP1, and which comprise any of the 55
CC sequences of 20 bp, fully defined in the specification. The compound,
CC composition and methods are useful for treating a disease or condition
CC associated with MMP1, such as hyperproliferative disorder, e.g. cancer,
CC inflammatory disorder or atherosclerosis, by inhibiting the expression of
CC MMP1. They are also useful in research and diagnostics for modulating the
CC expression of MMP1. The antisense compounds can act as MMP1 inhibitors
CC and have the following activities: cytostatic, antiinflammatory, and
CC antiarteriosclerotic. This polynucleotide sequence represents one of the
CC antisense compounds used for modulating the expression of matrix
CC metalloproteinase 1 of the invention.
XX
XX Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 5.8e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 962 AGAGGTCCTACACCGAGAC 981
DB 20 AGAATGCTGTACCGGATAC 1

RESULT 354
ADD19339/c
ID ADD19339 standard; DNA; 20 BP.
XX AC ADD19339;
XX DT 15-JAN-2004 (first entry)
XX DE Leptin gene-specific PCR primer #2.
XX feline; cat; leptin; leptin inhibitor; obesity; PCR; ss; primer.
XX Unidentified.
XX JP2003038187-A.
XX 12-FEB-2003.
XX 31-JUL-2001; 2001JP-00230711.
XX 31-JUL-2001; 2001JP-00230711.
XX (MOMI) MORINAGA & CO LTD.
XX WPI; 2003-527653/50.
XX
XX Novel feline leptin polypeptide encoded by a feline ob gene which is
PT related to obesity in cats, useful for diagnosing and treating obesity.
XX
XX Example; SEQ ID NO 6; 18pp; Japanese.
XX
XX The invention comprises the amino acid and coding sequences of feline
CC leptin proteins. The DNA and protein sequences of the invention are
CC useful for screening for a compound which inhibits the activity of
CC leptin. The DNA and protein sequences of the are also useful for
CC diagnosing and treating obesity. The present DNA sequence represents a
CC PCR primer that was used in an example of the invention.
XX
XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 5.8e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 1075 TACTCCAAATGAGTGGTGAC 1094
DB 20 TACTCCACAGAGTGGTGGC 1
XX
XX RESULT 355
ADE71316/c
ID ADE71316 standard; DNA; 20 BP.
XX AC ADE71316;
XX DT 29-JAN-2004 (first entry)
XX PCR primer #2 used to illustrate microorganism breeding method.
XX Microorganism; PCR; primer; ss.
XX Synthetic.
XX JP2003047477-A.
XX 18-FEB-2003.
XX 07-AUG-2001; 2001JP-00239331.
XX 07-AUG-2001; 2001JP-00239331.
XX (MITU) MITSUBISHI CHEM CORP.

KW Acyl CoA cholesterol acyltransferase-2; antisense therapy; antilipemic;
KW antiarteriosclerotic; cardiovascular; ACAT-2; lipid metabolism;
KW cholesterol metabolism; atherosclerosis; cardiovascular disease;
KW phosphorothioate; mouse; ss.
XX Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Oligonucleotide has phosphorothioate backbone and
FT all cytidine nucleotides are 5-methylcytidine. Optionally
FT some nucleotides with 2'-methoxyethyl (2'-MOE wings)
FT modification"
XX
FN W02003011889-A2.
XX
XX
XX 13-FEB-2003.
XX
XX 15-JUL-2002; 2002WO-US022746.
XX
XX 30-JUL-2001; 2001US-00918026.
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ, Lemonidis KM;
XX
XX WPI; 2003-248145/24.
XX
XX New antisense oligonucleotides for modulating acyl CoA cholesterol
FT acyltransferase-2, e.g. for preventing or treating diseases associated
FT with abnormal lipid or cholesterol metabolism, atherosclerosis,
FT cardiovascular disease.
XX
XX Claim 3; Page 90; 112pp; English.
XX
XX The present invention relates to novel antisense oligonucleotides which
CC are targeted to human acyl CoA cholesterol acyltransferase-2 (ACAT-2)
CC nucleotide sequence (ACC42409-ACC42431), and mouse ACAT-2 (ACC42432-
CC ACC42457). The antisense oligonucleotides specifically hybridize with and
CC inhibit the expression of ACAT-2 nucleotide sequences (ACC42395 and
CC ACC42402). ACAT enzymes catalyze the synthesis of cholesterol esters from
CC free cholesterol and fatty acyl-CoA. The antisense oligonucleotides are
CC useful for treating an animal which has a disease or condition associated
CC with ACAT-2, e.g. a condition involving abnormal lipid metabolism, a
CC condition involving abnormal cholesterol metabolism, atherosclerosis, or
CC cardiovascular disease
XX
SQ Sequence 20 BP; 3 A; 10 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 938 GTGGCTGGCTACTGTCCAC 957
Db 1 GCGGCTGGCCACAGCCAC 20
RESULT 359
ADM34241/c
ID ADM34241 standard; DNA; 20 BP.
XX ADM34241;
AC ADM34241;
XX
XX 03-JUN-2004 (first entry)
XX Human p38 MAPK antisense oligonucleotide #25.
DE
XX
XX antisense; p38 mitogen activated protein kinase; p38 MAPK;
KW inflammatory disease; autoimmune disease; rheumatoid arthritis;
KW heart disease; ss; human.

XX Homo sapiens.
OS
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= Other
FT /note= "Phosphorothioate linkages. All cytosines are 5-
FT methyl cytosines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= Other
FT /note= "2'-methoxyethoxy nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= Other
FT /note= "2'-methoxyethoxy nucleotides"
XX
XX US2003176383-A1.
XX
XX 18-SEP-2003.
XX
XX 09-SEP-2002; 2002US-00238442.
XX
XX 06-APR-1999; 99US-00286904.
XX 15-AUG-2000; 2000US-00640101.
XX (MONI/) MONIA B P.
XX (GAAR/) GAARDE W A.
XX (NERO/) NERO P.
XX (MCKA/) MCKAY R.
XX
XX Monia BP, Gaarde WA, Nero P, McKay R;
PI
XX WPI; 2003-898587/82.
XX
XX New antisense oligonucleotides for modulating p38 mitogen activated
FT protein kinase (MAPK) expression, useful for diagnosing, preventing or
FT treating diseases associated with p38 MAPK, e.g. inflammation or heart
FT disease.
XX
XX Example 3; SEQ ID NO 29; 48pp; English.
XX
XX The invention relates to an antisense oligonucleotide 8-30 nucleobases in
CC length targeted to the 5'-untranslated region, translational start site,
CC translational termination region or 3'-untranslated region of a nucleic
CC acid molecule encoding a p38 mitogen activated protein kinase (MAPK),
CC where the antisense compound inhibits the expression of the p38 MAPK. The
CC antisense oligonucleotide is useful for inhibiting the expression of p38
CC MAPK in cells or tissues. It is also useful for treating an animal having
CC a disease or condition associated with p38 MAPK, e.g. an inflammatory or
CC an autoimmune disease (e.g. rheumatoid arthritis) or a heart disease. In
CC addition, the compound is used for diagnostics, prophylaxis, or as
CC research reagents or kits. The present sequence represents a p38 MAPK
CC antisense oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 764 TGCTCAAGGACCTCAACAC 783
Db 20 TGCTCAAGGACCTGAAGCAC 1
RESULT 360
ADG46789
ID ADG46789 standard; DNA; 20 BP.
XX
XX AC ADG46789;
XX

```
DT 11-MAR-2004 (first entry)
XX GUS cDNA sequencing PCR primer, GUS-1033R.
DE Hypermutable cell; mismatch repair; MMR protein; primer; PCR; ss.
XX Unidentified.
XX US2003091997-A1.
XX 15-MAY-2003.
XX 15-JAN-2001; 2001US-00760285.
XX 15-JAN-2001; 2001US-00760285.
XX (NICO//) NICOLAIDES N C.
XX (GRAS//) GRASSO L.
XX (SASS//) SASS P M.
XX Nicolaides NC, Grasso L, Sass PM;
XX WPI; 2004-020233/02.
XX Making hypermutable cell by exposing cell to inhibitor of mismatch repair
XX e.g. an anthracene, an ATPase inhibitor, a nuclease inhibitor or a
XX polymerase inhibitor.
XX Example 6; SEQ ID NO 40; 68pp; English.
XX The invention relates to a method for making a hypermutable cell. The
XX method comprises exposing a cell to an inhibitor of mismatch repair,
XX where the inhibitor is an anthracene, an ATPase inhibitor, a nuclease
XX inhibitor, a polymerase inhibitor, or an antisense oligonucleotide that
XX specifically hybridises to a nucleotide encoding a mismatch repair
XX protein. The method further involves testing the animal or plant to
XX determine whether the gene of interest comprises a mutation. The method
XX is useful for making a hypermutable cell. The present sequence is a PCR
XX primer used for sequencing GUS (beta-glucuronidase) cDNA.
XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
XX Query Match 0.9%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 5.8e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1723 CATGTTCACTGCCCACTTG 1742
Db 1 CATGTTCACTGCCCACTCG 20
RESULT 361
ADH48267
ID ADH48267 standard; DNA; 20 BP.
XX AC ADH48267;
XX 25-MAR-2004 (first entry)
XX Human GRK6 DNA, antisense oligonucleotide #59.
XX Antisense therapy; human; G protein-coupled receptor kinase 6;
XX GPCR kinase 6; GRK6; rheumatoid arthritis; drug addiction;
XX uterine contractility; hypertension; aberrant haematopoiesis;
XX antiinflammatory; antiarthritic; antirheumatic; hypotensive;
XX phosphorothioate; ss.
XX Homo sapiens.
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
```

```
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX US2003228689-A1.
XX 11-DEC-2003.
XX 31-MAY-2002; 2002US-00159856.
XX 31-MAY-2002; 2002US-00159856.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Dobie KW;
XX WPI; 2004-052027/05.
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6, useful
XX for treating diabetes, drug addiction, uterine contractility and
XX hypertension.
XX Example 15; SEQ ID NO 69; 58pp; English.
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6 (GRK6).
XX The antisense compound comprises an antisense oligonucleotide that
XX specifically hybridises with the nucleic acid and inhibits the expression
XX of GRK6. The antisense oligonucleotide is a chimeric oligonucleotide. The
XX antisense oligonucleotide comprises at least one modified internucleoside
XX linkage, preferably a phosphorothioate linkage. It also comprises at
XX least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX sugar moiety. The antisense oligonucleotide further comprises at least
XX one modified nucleobase, preferably a 5-methylcytosine. The antisense
XX oligonucleotides are useful for the treatment of diseases such as
XX rheumatoid arthritis, drug addiction, uterine contractility,
XX hypertension, and diseases or conditions arising from aberrant
XX haematopoiesis. The present sequence represents an antisense
XX oligonucleotide used in the examples of the present invention.
XX Sequence 20 BP; 6 A; 8 C; 5 G; 1 T; 0 U; 0 Other;
XX Query Match 0.9%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 5.8e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1566 GCCTGACTCAGCGAGCCAG 1585
Db 1 GCCAAACTCAGCGAGCCAG 20
RESULT 362
ADH48321/c
ID ADH48321 standard; DNA; 20 BP.
XX AC ADH48321;
XX 25-MAR-2004 (first entry)
XX Human GRK6 DNA target sequence #35.
XX Antisense therapy; human; G protein-coupled receptor kinase 6;
XX GPCR kinase 6; GRK6; rheumatoid arthritis; drug addiction;
XX uterine contractility; hypertension; aberrant haematopoiesis;
XX antiinflammatory; antiarthritic; antirheumatic; hypotensive; ds.
XX Homo sapiens.
XX US2003228689-A1.
XX 11-DEC-2003.
```


XX 31-MAY-2002; 2002US-00159856.
XX
XX
PR 31-MAY-2002; 2002US-00159856.
XX
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Dobie KW;
XX
DR WPI; 2004-052027/05.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6, useful
PT for treating diabetes, drug addiction, uterine contractility and
PT hypertension.
XX
XX Example 15; SEQ ID NO 123; 58pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6 (GRK6).
CC The antisense compound comprises an antisense oligonucleotide that
CC specifically hybridises with the nucleic acid and inhibits the expression
CC of GRK6. The antisense oligonucleotide is a chimeric oligonucleotide. The
CC antisense oligonucleotide comprises at least one modified internucleoside
CC linkage, preferably a phosphorothioate linkage. It also comprises at
CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
CC sugar moiety. The antisense oligonucleotide further comprises at least
CC one modified nucleobase, preferably a 5-methylcytosine. The antisense
CC oligonucleotides are useful for the treatment of diseases such as
CC rheumatoid arthritis, drug addiction, uterine contractility,
CC hypertension, and diseases or conditions arising from aberrant
CC haematopoiesis. The present sequence represents a human GRK6 DNA target
CC sequence for an antisense oligonucleotide.
XX
XX Sequence 20 BP; 1 A; 5 C; 8 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1566 GCCTGACTCAGCGCCAG 1585
Db 20 GCCAACTCAGCGCCAG 1
RESULT 363
ADH60189
ID ADH60189 standard; DNA; 20 BP.
XX
XX
AC ADH60189;
XX
DT 25-MAR-2004 (first entry)
DE Human JAM 3 antisense oligonucleotide ISIS 229597.
XX
XX ss; junctional adhesion molecule 3; JAM 3; autoimmune disorder;
KW multiple sclerosis; organ rejection; inflammation; human; antisense.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX US2003232034-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JUN-2002; 2002US-00174771.
XX
XX 17-JUN-2002; 2002US-00174771.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX

DR WPI; 2004-061251/06.
XX
XX New antisense oligonucleotides for modulating junctional adhesion
PT molecule 3 expression, useful for diagnosing, preventing or treating
PT conditions associated with the adhesion molecule, e.g. multiple sclerosis
PT or organ rejection.
XX
XX Example 15; SEQ ID NO 50; 57pp; English.
XX
XX The invention relates to a compound 8-80 nucleobases in length targeted
CC to a nucleic acid molecule encoding junctional adhesion molecule 3 (JAM
CC 3). The antisense oligonucleotide is useful for inhibiting the expression
CC of junctional adhesion molecule 3 in cells or tissues to treat diseases
CC associated with their expression, e.g. an autoimmune disorder (e.g.
CC multiple sclerosis), an organ rejection or an inflammation. In addition,
CC the compound is used for diagnostics, prophylaxis, or as research
CC reagents or kits. The present sequence represents a human junctional
CC adhesion molecule 3 (JAM 3) antisense oligonucleotide.
XX
XX Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 585 ATCTGAGATTGGCTTTGGGA 604
Db 1 ATCTGGGATTGGCTCTGGAA 20
RESULT 364
ADH60259/c
ID ADH60259 standard; DNA; 20 BP.
XX
XX
AC ADH60259;
XX
DT 25-MAR-2004 (first entry)
DE Human JAM 3 target sequence ISIS 146178.
XX
XX ss; junctional adhesion molecule 3; JAM 3; autoimmune disorder;
KW multiple sclerosis; organ rejection; inflammation; human.
XX
XX Homo sapiens.
XX
XX US2003232034-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JUN-2002; 2002US-00174771.
XX
XX 17-JUN-2002; 2002US-00174771.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX
XX WPI; 2004-061251/06.
XX
XX New antisense oligonucleotides for modulating junctional adhesion
PT molecule 3 expression, useful for diagnosing, preventing or treating
PT conditions associated with the adhesion molecule, e.g. multiple sclerosis
PT or organ rejection.
XX
XX Example 15; SEQ ID NO 120; 57pp; English.
XX
XX The invention relates to a compound 8-80 nucleobases in length targeted
CC to a nucleic acid molecule encoding junctional adhesion molecule 3 (JAM
CC 3). The antisense oligonucleotide is useful for inhibiting the expression
CC of junctional adhesion molecule 3 in cells or tissues to treat diseases
CC associated with their expression, e.g. an autoimmune disorder (e.g.
CC multiple sclerosis), an organ rejection or an inflammation. In addition,
CC the compound is used for diagnostics, prophylaxis, or as research

CC reagents or kits. The present sequence represents a human junctional
CC adhesion molecule 3 (JAM 3) target sequence.

SQ Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 5.8e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 585 ATCTGAGATTGGCTTTGGGA 604

Db 20 ATCTGGGATTGGCTCTGGAA 1

RESULT 365

ADH63646/c

ID ADH63646 standard; DNA; 20 BP.

XX AC ADH63646;

XX DT 25-MAR-2004 (first entry)

XX DE Human glucocorticoid receptor-specific antisense oligonucleotide #480.

XX KW antisense oligonucleotide; glucocorticoid receptor; infection;

XX KW inflammation; tumour formation; diabetes; obesity;

XX KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;

XX KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX OS Homo sapiens.

XX PN WO2003099215-A2.

XX PD 04-DEC-2003.

XX PF 20-MAY-2003; 2003WO-US016084.

XX PR 20-MAY-2002; 2002US-0381857P.

XX PA (PHAA) PHARMACIA CORP.

XX PI Crosby SD, Nalseth AB;

XX DR WPI; 2004-035034/03.

XX PT New antisense compound targeted to a nucleic acid molecule encoding

PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,

PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.

XX PS Claim 4; SEQ ID NO 480; 985pp; English.

XX CC The invention comprises an antisense oligonucleotides that are targeted

CC to nucleic acids encoding a mammalian glucocorticoid receptor. The

CC antisense oligonucleotides of the invention are useful for preventing or

CC delaying infection, inflammation or tumour formation. The antisense

CC oligonucleotides are also useful for treating diabetes, obesity,

CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The

CC present DNA sequence represents an antisense oligonucleotide that targets

CC the human glucocorticoid receptor gene. NOTE: The present sequence

CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX SQ Sequence 20 BP; 3 A; 6 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 5.8e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 619 ATTAAGCTGGACAACTGGG 638

Db 20 ATTAAGCAAGAGAACTGGG 1

RESULT 366

ADH63392/c

ID ADH63392 standard; DNA; 20 BP.

XX AC ADH63392;

XX DT 25-MAR-2004 (first entry)

XX DE Human glucocorticoid receptor-specific antisense oligonucleotide #226.

XX KW antisense oligonucleotide; glucocorticoid receptor; infection;

XX KW inflammation; tumour formation; diabetes; obesity;

XX KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;

XX KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX OS Homo sapiens.

XX PN WO2003099215-A2.

XX PD 04-DEC-2003.

XX PF 20-MAY-2003; 2003WO-US016084.

XX PR 20-MAY-2002; 2002US-0381857P.

XX PA (PHAA) PHARMACIA CORP.

XX PI Crosby SD, Nalseth AB;

XX DR WPI; 2004-035034/03.

XX PT New antisense compound targeted to a nucleic acid molecule encoding

PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,

PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.

XX PS Claim 4; SEQ ID NO 226; 985pp; English.

XX CC The invention comprises an antisense oligonucleotides that are targeted

CC to nucleic acids encoding a mammalian glucocorticoid receptor. The

CC antisense oligonucleotides of the invention are useful for preventing or

CC delaying infection, inflammation or tumour formation. The antisense

CC oligonucleotides are also useful for treating diabetes, obesity. The

CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The

CC present DNA sequence represents an antisense oligonucleotide that targets

CC the human glucocorticoid receptor gene. NOTE: The present sequence

CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX SQ Sequence 20 BP; 3 A; 6 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 5.8e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 620 TTAAGCTGGACAACTGGGC 639

Db 20 TTAAGCAAGAGAACTGGGC 1

RESULT 367

AD126613/c

ID AD126613 standard; DNA; 20 BP.

XX AC AD126613;

XX DT 15-APR-2004 (first entry)

XX DE Rat PIM1 antisense oligonucleotide K10.

XX KW pain modulator; PIM kinase family; locked nucleic acid; LNA;

XX KW phosphorothioate; analgesic; uropathic; antipruritic; cytostatic;

XX KW antiinflammatory; antiasthmatic; antisense; inhibition; gene therapy;

XX KW tactile allodynia; urinary incontinence; neurogenic bladder; pruritus;

XX KW tumour; asthma; primer; ss.

OS *Rattus sp.*
 XX WO2003106681-A2.
 XX 24-DEC-2003.
 XX 12-JUN-2003; 2003WO-BP006158.
 XX 14-JUN-2002; 2002DE-01026702.
 XX (CHEF) GRUENENTHAL GMBH.
 XX Altan O, Kurreck J, Gruenweller A, Erdmann V;
 XX WPI; 2004-142780/14.
 XX
 XX New oligonucleotides directed against PIM1 kinase, useful for treating,
 XX e.g. pain, urinary incontinence, tumors and inflammation, by gene
 XX therapy.
 XX
 XX Disclosure; Fig 3; 37pp; German.
 XX
 XX This invention describes novel oligonucleotides or polynucleotide
 XX constructs which are used in pharmaceutical or diagnostic compositions.
 XX The oligonucleotides are used for identifying modulators of pain, based
 XX on the ability of labelled oligonucleotides or polynucleotide constructs
 XX to bind to an RNA. The oligonucleotides can also be used to diagnose
 XX disease associated with altered expression of genes of the PIM kinase
 XX family by measuring binding. The oligonucleotides have at least one
 XX modified ribose, phosphodiester and/or base component. Particularly many,
 XX of the nucleotides are 'locked nucleic acids' (LNA) or at least one
 XX nucleotide is a phosphorothioate. The polynucleotide construct comprises
 XX a ribozyme, DNA enzyme, vector (particularly for expression) or peptide
 XX nucleic acid, most preferably a hammerhead ribozyme or Type 8-17 DNA
 XX enzyme. It may be attached to a carrier (preferably the proteins tet,
 XX transportin or ferritin) and/or encapsulated in a liposome. The products
 XX of the invention have analgesic, uropathic, antipruritic, cytostatic,
 XX antiinflammatory and antiasthmatic activity and can be used for antisense
 XX and catalytic inhibition of PIM kinases and for antisense gene therapy.
 XX The oligonucleotides are useful for treating (i) pain, especially
 XX chronic, heat-induced or inflammatory pain, or tactile allodynia and (ii)
 XX urinary incontinence, neurogenic bladder symptoms, pruritus, tumours and
 XX inflammation, especially PIM1-kinase associated inflammation such as
 XX asthma, or generally any PIM1-related disease symptoms. They can also be
 XX used to screen for analgesic agents and for diagnosis of diseases
 XX associated with expression of PIM family genes ADI26552-ADI26627
 XX represent antisense oligonucleotides described in the disclosure of the
 XX invention.
 XX
 XX Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15,2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 5.8e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 254 CTGGAGAGGCCGCCACAGT 273
 Db 20 CTGGAGAGGCCGCCACCGT 1
 RESULT 368
 ADI27476
 ID ADI27476 standard; DNA; 20 BP.
 AC ADI27476;
 XX
 XX 22-APR-2004 (first entry)
 DE Human cell division cycle 2 target sequence ISIS 124874.
 XX
 XX hyperproliferative disorder; cancer; bone metabolism;
 KW Alzheimer's disease; human; cell division cycle 2; ss.
 XX

OS *Homo sapiens.*
 XX US2004006029-A1.
 XX 08-JAN-2004.
 XX 02-JUL-2002; 2002US-00189266.
 XX 02-JUL-2002; 2002US-00189266.
 XX (ISIS-) ISIS PHARM INC.
 XX Dean NM, Freier SM;
 XX WPI; 2004-081741/08.
 XX
 XX New compounds, particularly antisense oligonucleotides targeted to a
 XX nucleic acid encoding cell division cycle 2, useful for treating cancer,
 XX a disease resulting from dysregulation of bone metabolism or Alzheimer's
 XX disease.
 XX
 XX Example 15; SEQ ID NO 119; 61pp; English.
 XX
 XX The invention relates to a compound targeted to and which specifically
 XX hybridises with a nucleic acid molecule encoding cell division cycle 2,
 XX and inhibits the expression of cell division cycle 2. The compound,
 XX composition and methods are useful for treating a disease or condition
 XX associated with cell division cycle 2, such as hyperproliferative
 XX disorder e.g. cancer, or a disease or condition resulting from
 XX dysregulation of bone metabolism, or Alzheimer's disease. They are also
 XX useful in research and diagnostics for modulating the expression of cell
 XX division cycle 2. The present sequence represents a human cell division
 XX cycle 2 target sequence.
 XX
 XX Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15,2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 5.8e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 1031 CTGACTTTGGCTGCGCGA 1050
 Db 1 CTGACTTTGGCTGCGCAGA 20
 RESULT 369
 ADI27456
 ID ADI27456 standard; DNA; 20 BP.
 AC ADI27456;
 XX
 XX 22-APR-2004 (first entry)
 DE Human cell division cycle 2 target sequence ISIS 124847.
 XX
 XX hyperproliferative disorder; cancer; bone metabolism;
 KW Alzheimer's disease; human; cell division cycle 2; ss.
 XX
 XX *Homo sapiens.*
 XX US2004006029-A1.
 XX 08-JAN-2004.
 XX 02-JUL-2002; 2002US-00189266.
 XX 02-JUL-2002; 2002US-00189266.
 XX (ISIS-) ISIS PHARM INC.
 XX Dean NM, Freier SM;
 XX WPI; 2004-081741/08.
 XX

XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding cell division cycle 2, useful for treating cancer,
PT a disease resulting from dysregulation of bone metabolism or Alzheimer's
PT disease.
PT
XX Example 15; SEQ ID NO 99; 61pp; English.
XX
XX The invention relates to a compound targeted to and which specifically
CC hybridises with a nucleic acid molecule encoding cell division cycle 2,
CC and inhibits the expression of cell division cycle 2. The compound,
CC composition and methods are useful for treating a disease or condition
CC associated with cell division cycle 2, such as hyperproliferative
CC disorder e.g. cancer, or a disease or condition resulting from
CC dysregulation of bone metabolism, or Alzheimer's disease. They are also
CC useful in research and diagnostics for modulating the expression of cell
CC division cycle 2. The present sequence represents a human cell division
CC cycle 2 target sequence.
XX
XX Sequence 20 BP; 9 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 710 TCAGACTGGACATGAAG 729
DB 1 TCAGACTAGAACTGAAG 20
RESULT 370
AD127409/C
ID AD127409 standard; DNA; 20 BP.
XX
AC
AC AD127409;
XX
DT 22-APR-2004 (first entry)
XX
DE Human cell division cycle 2 antisense oligonucleotide ISIS 207240.
XX
XX hyperproliferative disorder; cancer; bone metabolism;
KW Alzheimer's disease; human; cell division cycle 2; ss; antisense.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX US2004006029-A1.
PN
XX
XX 08-JAN-2004.
PD
XX
XX 02-JUL-2002; 2002US-00189266.
PF
XX
XX 02-JUL-2002; 2002US-00189266.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Dean NM, Freier SM;
PI
XX
XX WPI; 2004-081741/08.
DR
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding cell division cycle 2, useful for treating cancer,
PT a disease resulting from dysregulation of bone metabolism or Alzheimer's
PT disease.
XX
XX Example 15; SEQ ID NO 52; 61pp; English.
XX
XX The invention relates to a compound targeted to and which specifically
CC hybridises with a nucleic acid molecule encoding cell division cycle 2,
CC and inhibits the expression of cell division cycle 2. The compound,
CC composition and methods are useful for treating a disease or condition
CC associated with cell division cycle 2, such as hyperproliferative
CC disorder e.g. cancer, or a disease or condition resulting from

CC dysregulation of bone metabolism, or Alzheimer's disease. They are also
CC useful in research and diagnostics for modulating the expression of cell
CC division cycle 2. The present sequence represents a human cell division
CC cycle 2 antisense oligonucleotide.
XX
XX Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1031 CTGACTTTGGCTGGCCCGA 1050
DB 20 CTGATTTGGCTTGCAGA 1

RESULT 371
AD127382/C
ID AD127382 standard; DNA; 20 BP.
XX
AC AD127382;
XX
DT 22-APR-2004 (first entry)
XX
DE Human cell division cycle 2 antisense oligonucleotide ISIS 207213.

KW hyperproliferative disorder; cancer; bone metabolism;
KW Alzheimer's disease; human; cell division cycle 2; ss; antisense.

OS Homo sapiens.
OS Synthetic.

PN US2004006029-A1.

XX 08-JAN-2004.

XX 02-JUL-2002; 2002US-00189266.

XX 02-JUL-2002; 2002US-00189266.

XX (ISIS-) ISIS PHARM INC.

XX Dean NM, Freier SM;

XX WPI; 2004-081741/08.

XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding cell division cycle 2, useful for treating cancer,
PT a disease resulting from dysregulation of bone metabolism or Alzheimer's
PT disease.

XX Example 15; SEQ ID NO 25; 61pp; English.

XX The invention relates to a compound targeted to and which specifically
CC hybridises with a nucleic acid molecule encoding cell division cycle 2,
CC and inhibits the expression of cell division cycle 2. The compound,
CC composition and methods are useful for treating a disease or condition
CC associated with cell division cycle 2, such as hyperproliferative
CC disorder e.g. cancer, or a disease or condition resulting from
CC dysregulation of bone metabolism, or Alzheimer's disease. They are also
CC useful in research and diagnostics for modulating the expression of cell
CC division cycle 2. The present sequence represents a human cell division
CC cycle 2 antisense oligonucleotide.

XX Sequence 20 BP; 3 A; 6 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 710 TCAGACTGGACATGAAG 729

DB 20 TCAGACTAGAACTGAAG 1

RESULT 372
ADI38759/c
ID ADI38759 standard; DNA; 20 BP.
XX
XX
AC ADI38759;
XX
XX
DT 22-APR-2004 (first entry)
XX
DE Human LIM domain kinase 1 antisense oligonucleotide #43.
XX
XX neuroprotective; LIM domain kinase 1; developmental disorder;
KW neurological disorder; diagnostic; prophylaxis; human; ss.
XX
XX Homo sapiens.
OS
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004014047-A1.
XX
XX 22-JAN-2004.
XX
XX 18-JUL-2002; 2002US-00199199.
XX
XX 18-JUL-2002; 2002US-00199199.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cowsert LM, Dobie KW;
XX
XX WPI; 2004-121553/12.
XX
XX New antisense oligonucleotides for modulating LIM domain kinase 1
PT expression, useful for diagnosing, preventing or treating conditions
PT associated with the kinase, e.g. neurological or developmental disorders.
XX
XX Example 15; SEQ ID NO 59; 81pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted to
CC a nucleic acid molecule encoding LIM domain kinase 1. The compound
CC specifically hybridizes with the nucleic acid molecule encoding LIM
CC domain kinase 1 and inhibits the expression of LIM domain kinase 1. It
CC specifically hybridizes with at least an 8-nucleobase portion of a
CC preferred target region on the nucleic acid molecule encoding LIM domain
CC kinase 1. The antisense oligonucleotide is useful for modulating the
CC expression of LIM domain kinase 1 in cells or tissues to treat diseases
CC associated with their expression, such as a developmental disorder or a
CC neurological disorder. In addition, the compound is used for diagnostics,
CC prophylaxis, or as research reagents or kits. This sequence represents a
CC human LIM domain kinase 1 antisense oligonucleotide.
XX
XX Sequence 20 BP; 2 A; 2 C; 9 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 5.8e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 976 CGAGACCTCAAGCCCGAGAA 995
|||||

Db 20 CGAGACCTCAACTCCACAA 1
RESULT 373
ADI26865/c
ID ADI26865 standard; DNA; 20 BP.
XX
XX
AC ADI26865;
XX
XX
DT 22-APR-2004 (first entry)
XX
DE Cyclin dependent kinase 4 antisense oligonucleotide #31.
XX
XX cytostatic; antidiabetic; antiinfertility; gene therapy;
KW cyclin-dependent kinase 4; diabetes; infertility;
KW hyperproliferative disorder; cancer; antisense technology; human; ss.
XX
XX Homo sapiens.
OS
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004005567-A1.
XX
XX 08-JAN-2004.
XX
XX 02-JUL-2002; 2002US-00188779.
XX
XX 02-JUL-2002; 2002US-00188779.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dean NM, Freier SM, Dobie KW;
XX
XX WPI; 2004-081710/08.
XX
XX New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding cyclin-dependent kinase 4, useful for preparing a
PT composition for treating diabetes, infertility or hyperproliferative
PT disorder, e.g., cancer.
XX
XX Example 15; SEQ ID NO 50; 90pp; English.
XX
XX The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclin-
CC dependent kinase 4, specifically hybridizes with the nucleic acid
CC encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-
CC dependent kinase 4. The antisense oligonucleotide is useful for preparing
CC a composition for treating diabetes, infertility or hyperproliferative
CC disorder, e.g., cancer. This sequence represents a human cyclin dependent
CC kinase 4 antisense oligonucleotide.
XX
XX Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 5.8e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 1086 GGTGGTACACTGTGTACC 1105
|||||

```
RESULT 374
AD127015
ID AD127015 standard; DNA; 20 BP.
XX
AC AD127015;
XX
XX 22-APR-2004 (first entry)
XX
XX Cyclin dependent kinase 4 antisense oligonucleotide #181.
DE
DE
XX
XX Cytostatic; antidiabetic; antiinfertility; gene therapy;
KW
KW cyclin-dependent kinase 4; diabetes; infertility;
KW
KW hyperproliferative disorder; cancer; antisense technology; human; ss.
XX
OS Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004005567-A1.
PN
XX
XX 08-JAN-2004.
PD
XX
XX 02-JUL-2002; 2002US-00188779.
PF
XX
XX 02-JUL-2002; 2002US-00188779.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Dean NM, Freier SM, Dobie KW;
PI
XX
XX WPI; 2004-081710/08.
DR
XX
XX New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding cyclin-dependent kinase 4, useful for preparing a
PT composition for treating diabetes, infertility or hyperproliferative
PT disorder, e.g., cancer.
XX
XX Example 15; SEQ ID NO 200; 90pp; English.
PS
XX
XX The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclin-
CC dependent kinase 4, specifically hybridises with the nucleic acid
CC encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-
CC dependent kinase 4. The antisense oligonucleotide is useful for preparing
CC a composition for treating diabetes, infertility or hyperproliferative
CC disorder, e.g., cancer. This sequence represents a human cyclin dependent
CC kinase 4 antisense oligonucleotide.
XX
XX Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1086 GGTGGTGACACTGTGGTACC 1105
Db 1 GGTTGTACACTCTGGTACC 20
```

```
RESULT 375
ADJ64122
ID ADJ64122 standard; DNA; 20 BP.
XX
AC ADJ64122;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human phospholipase D2 antisense oligonucleotide ISIS #159059.
DE
DE
XX
XX Phospholipase D2; hyperproliferative disorder; cancer;
KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW infection; inflammation; tumour; therapy; human; antisense; ss.
XX
OS Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone where all cytidines are
FT 5'-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'- methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'- methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004005705-A1.
PN
XX
XX 08-JAN-2004.
PD
XX
XX 20-JUN-2002; 2002US-00177896.
PF
XX
XX 20-JUN-2002; 2002US-00177896.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Bennett CF, Dobie KW;
PI
XX
XX WPI; 2004-081729/08.
DR
XX
XX New antisense compounds targeted to nucleic acid molecules encoding
PT phospholipase D2, useful for treating diseases associated with expression
PT of phospholipase D2, e.g. cancer, Alzheimer's disease or Parkinson's
PT disease.
XX
XX Example 15; SEQ ID NO 26; 46pp; English.
PS
XX
XX The present invention relates to antisense oligonucleotides which are
CC targeted to nucleic acid molecule encoding phospholipase D2 and the
CC encoding protein. The invention is useful for inhibiting the expression
CC of phospholipase D2 and for treating diseases and conditions associated
CC with expression of phospholipase D2 e.g. hyperproliferative disorder such
CC as cancer, neurodegenerative disease such as Alzheimer's disease and
CC Parkinson's disease. The invention is also useful for therapeutic and
CC prophylactic applications to prevent or delay infection, inflammation and
CC tumour formation. The present sequence is human phospholipase D2
CC antisense oligonucleotide.
XX
XX Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 740 GCACCGCCATCCGGGAGTG 759
Db 1 GGTTGTACACTCTGGTACC 20
```

Db 1 GCACGTGCCCTCTCTGGAAGTG 20

RESULT 376
ADJ64156/c

ID ADJ64156 standard; DNA; 20 BP.

XX AC ADJ64156;

XX 06-MAY-2004 (first entry)

XX Human phospholipase D2 target oligonucleotide #13.

XX Phospholipase D2; hyperproliferative disorder; cancer;

KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;

KW infection; inflammation; tumour; therapy; human; ss.

XX Homo sapiens.

XX US2004005705-A1.

XX 08-JAN-2004.

XX 20-JUN-2002; 2002US-00177896.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Dobie KW;

XX WPI; 2004-081729/08.

XX New antisense compounds targeted to nucleic acid molecules encoding phospholipase D2, useful for treating diseases associated with expression of phospholipase D2, e.g. cancer, Alzheimer's disease or Parkinson's disease.

XX Example 15; SEQ ID NO 60; 46pp; English.

XX The present invention relates to antisense oligonucleotides which are targeted to nucleic acid molecule encoding phospholipase D2 and the encoding protein. The invention is useful for inhibiting the expression of phospholipase D2 and for treating diseases and conditions associated with expression of phospholipase D2 e.g. hyperproliferative disorder such as cancer, neurodegenerative disease such as Alzheimer's disease and Parkinson's disease. The invention is also useful for therapeutic and prophylactic applications to prevent or delay infection, inflammation and tumour formation. The present sequence is human phospholipase D2 target oligonucleotide.

XX Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 740 GCACGGCCATCCGGGAAGTG 759
||||| ||||| ||||| ||||| |||||

Db 20 GCATGCGCCCTCTGGAAGTG 1

RESULT 377

ID ADL00971/c

ADL00971 standard; DNA; 20 BP.

XX AC ADL00971;

XX 20-MAY-2004 (first entry)

XX Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #504.

XX Human; VEGF co-regulated chemokine-1; VCC-1;

KW vascular endothelial growth factor; ss; antisense compound;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; antisense oligonucleotide; diabetes;
KW immunological disorder; cardiovascular disorder; neurological disorder;
KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;
KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;
KW fibrosis; myocardial infarction; wound healing; bone fracture;
KW cartilage damage; tissue regeneration; organ regeneration;
KW periodontal disease; gut regeneration; atrial fibrillation.

XX Homo sapiens.

OS WO2004016224-A2.

XX 26-FEB-2004.

XX 19-AUG-2003; 2003WO-US025891.

XX 19-AUG-2002; 2002US-040484P.

XX (PHAA) PHARMACIA CORP.

XX Weinstein EJ;

XX WPI; 2004-192065/18.

XX New antisense compounds targeted to a nucleic acid molecule encoding vascular endothelial growth factor co-regulated chemokine-1 (VCC-1), useful for treating VCC-1-associated disorders, e.g. diabetes or a neurologic disorder.

XX Claim 4; SEQ ID NO 504; 336pp; English.

XX The invention relates to an antisense compound targeted to a nucleic acid molecule encoding human vascular endothelial growth factor (VEGF) co-regulated chemokine-1 (VCC-1), and which specifically hybridises with and inhibits the expression of VCC-1. The invention also relates to a composition comprising the antisense compound, a method of inhibiting the expression of VCC-1 in cells or tissues comprising contacting the cells or tissues with the antisense compound and a method of treating a human having a disease or condition associated with VCC-1 comprising administering the antisense compound to an animal to inhibit expression of VCC-1. The antisense oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, and at least one modified nucleobase, specifically a 5-methylcytosine. The antisense oligonucleotide preferably is a chimeric oligonucleotide. The antisense compound is useful for treating a disease or condition associated with VCC-1, such as diabetes, an immunological disorder, a cardiovascular disorder, a neurological disorder, ischaemia, reperfusion injury, cancer or an angiogenic disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis, atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1 antisense oligonucleotides may also be used for wound healing, for healing of bone fractures and cartilage damage, for regeneration of tissues or organs, for treating periodontal diseases, for gut protection or regeneration, for treatment of lung or liver fibrosis or for management of atrial fibrillation. This sequence represents an antisense oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of the invention.

SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1176 CTTCTATGAGATGCCACAG 1195
||||| ||||| ||||| ||||| |||||

Db 20 CTTCTAGGAGATGGCTCCAG 1

RESULT 378

```
ADL01092/c
ID ADL01092 standard; DNA; 20 BP.
XX
AC ADL01092;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #625.
XX
XX Human; VEGF co-regulated chemokine-1; VCC-1;
KW vascular endothelial growth factor; ss; antisense compound;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; antisense oligonucleotide; diabetes;
KW immunological disorder; cardiovascular disorder; neurological disorder;
KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;
KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;
KW fibrosis; myocardial infarction; wound healing; bone fracture;
KW cartilage damage; tissue regeneration; organ regeneration;
KW periodontal disease; gut regeneration; atrial fibrillation.
XX
OS Homo sapiens.
XX
XX WO2004016224-A2.
XX
XX 26-FEB-2004.
XX
XX 19-AUG-2003; 2003WO-US025891.
XX
XX 19-AUG-2002; 2002US-0404484P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Weinstein EJ;
XX
XX WPI; 2004-192065/18.
XX
XX New antisense compounds targeted to a nucleic acid molecule encoding
PT vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),
PT useful for treating VCC-1-associated disorders, e.g. diabetes or a
PT neurologic disorder.
XX
XX Claim 4; SEQ ID NO 625; 336pp; English.
XX
XX The invention relates to an antisense compound targeted to a nucleic acid
CC molecule encoding human vascular endothelial growth factor (VEGF) co-
CC regulated chemokine-1 (VCC-1), and which specifically hybridises with and
CC inhibits the expression of VCC-1. The invention also relates to a
CC composition comprising the antisense compound, a method of inhibiting the
CC expression of VCC-1 in cells or tissues comprising contacting the cells
CC or tissues with the antisense compound and a method of treating a human
CC having a disease or condition associated with VCC-1 comprising
CC administering the antisense compound to an animal to inhibit expression
CC of VCC-1. The antisense oligonucleotide comprises at least one modified
CC internucleoside linkage, preferably a phosphorothioate linkage. It also
CC comprises at least one modified sugar moiety, preferably a 2'-O-
CC methoxyethyl sugar moiety, and at least one modified nucleobase,
CC specifically a 5-methylcytosine. The antisense oligonucleotide preferably
CC is a chimeric oligonucleotide. The antisense compound is useful for
CC treating a disease or condition associated with VCC-1, such as diabetes,
CC an immunological disorder, a cardiovascular disorder, a neurological
CC disorder, ischaemia, reperfusion injury, cancer or an angiogenic
CC disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis,
CC atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1
CC antisense oligonucleotides may also be used for wound healing, for
CC healing of bone fractures and cartilage damage, for regeneration of
CC tissues or organs, for treating periodontal diseases, for gut protection
CC or regeneration, for treatment of lung or liver fibrosis or for
CC management of atrial fibrillation. This sequence represents an antisense
CC oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of
CC the invention.
XX
XX Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
SQ
```

```
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1177 TTCTATGAGATGCCACAGG 1196
Db 20 TTCTAGGAGATGCTCCAGG 1

RESULT 379
ADL09179
ID ADL09179 standard; DNA; 20 BP.
XX
AC ADL09179;
XX
DT 20-MAY-2004 (first entry)
XX
DE Porcine stem cell factor (pSCF), PCR primer #6.
XX
KW ss; porcine pluripotent cell; porcine stem cell factor; pSCF;
KW porcine steel factor; primer; PCR.
XX
OS Sus sp.
XX
XX US6703209-B1.
XX
XX 09-MAR-2004.
XX
XX 13-AUG-1998; 98US-00133352.
XX
XX 13-AUG-1998; 98US-00133352.
XX
XX (BIOT-) BIOTRANSPLANT INC.
XX
XX Baetscher M, Brem G;
XX
XX WPI; 2004-292803/27.
XX
XX Culturing a porcine pluripotent cell for establishing
PT pluripotent/totipotent porcine cell lines, comprises culturing the
PT porcine pluripotent cell in the presence of STO8 feeder cells expressing
PT porcine stem cell factor.
XX
XX Example 4; SEQ ID NO 11; 38pp; English.
XX
XX The invention describes a method for culturing a porcine pluripotent
CC cell, comprising culturing a porcine pluripotent cell in the presence of
CC STO8 feeder cells which express a porcine stem cell factor. The porcine
CC stem cell factor is in membrane-bound form. The method is useful for
CC establishing pluripotent or totipotent porcine cell lines. The present
CC sequence represents a PCR primer used to clone porcine stem cell factor
CC (pSCF), also known as porcine 'steel' factor.
XX
XX Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 424 ATCGGCAACATCCCCACG 443
Db 1 ATCGGCAACCATCCCCAAG 20

RESULT 380
ADM1113/c
ID ADM1113 standard; DNA; 20 BP.
XX
AC ADM1113;
XX
DT 17-JUN-2004 (first entry)
XX
DE PCR primer of the invention SEQ ID NO:11.
```



```
XX DE Human forkhead box C2 antisense oligonucleotide ISIS2227189.
XX KW Human; ss; antisense; forkhead box C2; developmental disorder;
XX KW lymphoedema; lymphoedema-distichiasis; dysgeneses; iridocorneal angle;
XX KW Axenfeld-Rieger anomaly; congenital glaucoma.
XX OS Homo sapiens.
XX FH modified_base 1..20
XX FT Location/Qualifiers
XX FT 1..20
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone and all cytidines are 5
XX FT -methylcytidines"
XX FT modified_base 1..5
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl residue"
XX FT modified_base 16..20
XX FT /tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl residue"
XX US2004102621-A1.
XX PN 27-MAY-2004.
XX PD 21-NOV-2002; 2002US-00303635.
XX PF 21-NOV-2002; 2002US-00303635.
XX PR (ISIS-) ISIS PHARM INC.
XX PA Dobie KW;
XX PI WPI; 2004-399740/37.
XX DR New compound targeted to a nucleic acid molecule encoding forkhead box
XX PT C2, useful in diagnosing and treating developmental disorder.
XX PS Example 15; SEQ ID NO 74; 80pp; English.
XX CC The invention relates to a new compound 8-80 nucleobases in length (an
XX CC antisense oligonucleotide) targeted to a nucleic acid molecule encoding
XX CC forkhead box C2, where the compound specifically hybridises with the
XX CC nucleic acid molecule encoding human forkhead box C2 appearing as
XX CC ADN31339 and inhibits the expression of forkhead box C2. Also included
XX CC are inhibiting the expression of forkhead box C2 in cells or tissues,
XX CC screening for a modulator of forkhead box C2, a diagnostic method for
XX CC identifying a disease state, a kit or assay device comprising the
XX CC compound and treating an animal having a disease or condition associated
XX CC with forkhead box C2. The compound and methods are useful in diagnosing
XX CC and treating developmental disorders e.g. lymphoedemas such as lymphoedema-
XX CC distichiasis, dysgeneses of the mouse iridocorneal angle similar to those
XX CC seen in human Axenfeld-Rieger anomaly and congenital glaucoma. The
XX CC present sequence is an antisense oligonucleotide targeting forkhead box
XX CC C2.
XX SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 149 GGCAGCTGTGTAATGACACTC 168
Db 1 GGCAGCTGGCATTGCCACTC 20
RESULT 383
ADO55804/C
ID ADO55804 standard; DNA; 20 BP.
```

```
XX AC ADO55804;
XX DT 12-AUG-2004 (first entry)
XX DE Human NIMA-related kinase 6 DNA, antisense oligonucleotide #27.
XX KW Antisense therapy; human; NIMA-related kinase 6;
XX KW never in mitosis gene a-related kinase 6; hyperproliferative disorder;
XX KW cancer; cytostatic; phosphorothioate; ss.
XX OS Homo sapiens.
XX FH modified_base 1..20
XX FT Location/Qualifiers
XX FT 1..20
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "This oligonucleotide has a phosphorothioate
XX FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
XX FT and 3' ends, which are 5 nucleotides in length at each
XX FT end. All cytidine residues are 5-methylcytidines"
XX PN US2004097441-A1.
XX PD 20-MAY-2004.
XX PF 16-NOV-2002; 2002US-00295471.
XX PR 16-NOV-2002; 2002US-00295471.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Dobie KW;
XX DR WPI; 2004-389184/36.
XX PT New antisense oligonucleotides for modulating never in mitosis, gene a
XX PT (NIMA)-related kinase 6 expression, useful for diagnosing, preventing or
XX PT treating diseases associated with the kinase, e.g. hyperproliferative
XX PT disorders.
XX PS Example 15; SEQ ID NO 41; 51pp; English.
XX CC The present invention relates to antisense compounds targeted to a
XX CC nucleic acid encoding human never in mitosis gene a-related kinase 6
XX CC (NIMA-related kinase 6). The antisense compound comprises an antisense
XX CC oligonucleotide that specifically hybridises with the nucleic acid and
XX CC inhibits the expression of NIMA-related kinase 6. The antisense
XX CC oligonucleotide is a chimeric oligonucleotide. The antisense
XX CC oligonucleotide comprises at least one modified internucleoside linkage,
XX CC preferably a phosphorothioate linkage. It also comprises at least one
XX CC modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
XX CC moiety. The antisense oligonucleotide further comprises at least one
XX CC modified nucleobase, preferably a 5-methylcytosine. The antisense
XX CC oligonucleotides are useful for the treatment of diseases such as
XX CC hyperproliferative disorders, e.g. cancer. The present sequence
XX CC represents an antisense oligonucleotide used in the examples of the
XX CC present invention.
XX SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 967 GTGCTACACCGACCTCAA 986
Db 20 GTGATGCACCGACATCAA 1
RESULT 384
ADO55866
ID ADO55866 standard; DNA; 20 BP.
```

```
XX AC ADO55866;
XX DT 12-AUG-2004 (first entry)
XX DE Human NIMA-related kinase 6 DNA target sequence #20.
XX KW Antisense therapy; human; NIMA-related kinase 6;
XX KW never in mitosis gene a-related kinase 6; hyperproliferative disorder;
XX KW cancer; cytostatic; ds.
XX OS Homo sapiens.
XX PN US2004097441-A1.
XX PD 20-MAY-2004.
XX PF 16-NOV-2002; 2002US-00295471.
XX PR 16-NOV-2002; 2002US-00295471.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Dobie KW;
XX DR WPI; 2004-389184/36.
XX CC New antisense oligonucleotides for modulating never in mitosis, gene a
XX CC (NIMA)-related kinase 6 expression, useful for diagnosing, preventing or
XX CC treating diseases associated with the kinase, e.g. hyperproliferative
XX CC disorders.
XX PS Example 15; SEQ ID NO 112; 51bp; English.
XX CC The present invention relates to antisense compounds targeted to a
XX CC nucleic acid encoding human never in mitosis gene a-related kinase 6
XX CC (NIMA-related kinase 6). The antisense compound comprises an antisense
XX CC oligonucleotide that specifically hybridises with the nucleic acid and
XX CC inhibits the expression of NIMA-related kinase 6. The antisense
XX CC oligonucleotide is a chimeric oligonucleotide. The antisense
XX CC oligonucleotide comprises at least one modified internucleoside linkage,
XX CC preferably a phosphorothioate linkage. It also comprises at least one
XX CC modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
XX CC moiety. The antisense oligonucleotide further comprises at least one
XX CC modified nucleobase, preferably a 5-methylcytosine. The antisense
XX CC oligonucleotides are useful for the treatment of diseases such as
XX CC hyperproliferative disorders, e.g. cancer. The present sequence
XX CC represents a human NIMA-related kinase 6 DNA target sequence for an
XX CC antisense oligonucleotide.
XX SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e-02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 967 GTGCTACACCGAGACTCAA 986
   ||| ||| ||| ||| ||| ||| |||
DB 1 GTGATGCACCGAGACATCAA 20

RESULT 385
AAQ22395/c
ID AAQ22395 standard; DNA; 21 BP.
XX AC AAQ22395;
XX DT 09-JUL-1992 (first entry)
XX DE DNA for modulating effects of cytomegalovirus infection.
XX IE1; IE2; DNA polymerase; CMV; prophylactic; therapeutic;
XX antisense inhibition; gene expression; intron/exon boundary; ss.

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e-02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 967 GTGCTACACCGAGACTCAA 986
   ||| ||| ||| ||| ||| ||| |||
DB 1 GTGATGCACCGAGACATCAA 20

RESULT 385
AAQ22395/c
ID AAQ22395 standard; DNA; 21 BP.
XX AC AAQ22395;
XX DT 09-JUL-1992 (first entry)
XX DE DNA for modulating effects of cytomegalovirus infection.
XX IE1; IE2; DNA polymerase; CMV; prophylactic; therapeutic;
XX antisense inhibition; gene expression; intron/exon boundary; ss.
```

```
XX OS Cytomegalovirus.
XX PN WO9203456-A.
XX XX 05-MAR-1992.
XX PF 14-AUG-1991; 91WO-UO005815.
XX PR 16-AUG-1990; 90US-00568366.
XX XX (ISIS-) ISIS PHARM INC.
XX PI Anderson KP, Draper KG;
XX DR WPI; 1992-096819/12.
XX CC Oligo-nucleotide(s) for modulating effects of cytomegalovirus infections
XX CC - which can be hybridised with portion of RNA or DNA derived from IE1,
XX CC IE2 or DNA genes of cytomegalovirus.
XX PS Disclosure; Table 2; 44pp; English.
XX CC The oligonucleotide was synthesised to be complementary to the IE2 NUC
XX CC SIG 2 of human cytomegalovirus. This site is known to control mRNA
XX CC stability, processing and/or translational efficiency. The synthetic
XX CC oligomer can hybridise to the native DNA polymerase of cytomegalovirus
XX CC and modulate the activity of CMV. The oligomer can be used
XX CC prophylactically or therapeutically to reduce the severity of disease
XX CC caused by CMV. It specifically inhibits replication of CMV by antisense
XX CC inhibition of gene expression. See also AAQ22353-400
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
   ||| ||| ||| ||| ||| ||| |||
DB 21 CGCAAGAAGAGAGCAACG 2

RESULT 386
AAQ22372
ID AAQ22372 standard; DNA; 21 BP.
XX AC AAQ22372;
XX DT 09-JUL-1992 (first entry)
XX DE DNA for modulating effects of cytomegalovirus infection.
XX IE1; IE2; DNA polymerase; CMV; prophylactic; therapeutic;
XX antisense inhibition; gene expression; intron/exon boundary; ss.

OS Cytomegalovirus.
XX PN WO9203456-A.
XX XX 05-MAR-1992.
XX PF 14-AUG-1991; 91WO-UO005815.
XX PR 16-AUG-1990; 90US-00568366.
XX XX (ISIS-) ISIS PHARM INC.
XX PI Anderson KP, Draper KG;
XX DR WPI; 1992-096819/12.
XX CC Oligo-nucleotide(s) for modulating effects of cytomegalovirus infections
```

PT - which can be hybridised with portion of RNA or DNA derived from IE1,
 PT IE2 or DNA genes of cytomegalovirus.
 XX
 PS Claim 11; Page 36; 44pp; English.
 XX
 CC The oligonucleotide was synthesised to be complementary to the IE2 NUC
 CC SIG-2 region of human cytomegalovirus. This site is known to control mRNA
 CC stability, processing and/or translational efficiency. The synthetic
 CC oligomer can hybridise to the native DNA polymerase of cytomegalovirus
 CC and modulate the activity of CMV. The oligomer can be used
 CC prophylactically or therapeutically to reduce the severity of disease
 CC caused by CMV. It specifically inhibits replication of CMV by antisense
 CC inhibition of gene expression. See also AAQ22353-400
 XX
 SQ Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 130 CGGATGAAGAAGATCAACG 149
 DB 1 CGCAAGAAGAAGCAACG 20
 RESULT 387
 AAT11965/c
 ID AAT11965 standard; DNA; 21 BP.
 XX
 AC AAT11965;
 XX
 DT 25-MAR-2003 (revised)
 DT 13-MAR-1996 (first entry)
 XX
 DE Antisense oligonucleotide (ISIS 2922) complementary to human CMV.
 XX
 KW antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
 KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..21
 FT /*tag= a
 FT /note= "phosphorothioate backbone"
 XX
 US5442049-A.
 PN
 XX
 PD 15-AUG-1995.
 XX
 PF 25-JAN-1993; 93US-00009263.
 XX
 PR 19-NOV-1992; 92US-00927506.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Baker B, Draper K, Anderson K;
 XX WPI; 1995-292538/38.
 DR
 XX
 PT New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
 PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
 PT treatment of CMV diseases.
 XX
 PS Disclosure; Col 13-14; 66pp; English.
 XX
 CC Claim 1; Col 13-14; 66pp; English.
 XX
 CC This is a claimed antisense oligonucleotide (ON) which when tested for
 CC activity against cytomegalovirus (CMV) showed greater than 90% inhibition
 CC of virus at a concentration of 5 microm. The target of this ON is
 CC nucleotides 170120-141 of the intermediate early 2 (IE2) nuclear
 CC localisation signal 2 of the human CMV genome. Antisense ONs targeting
 CC CMV DNA or RNA coding for the IE1, IE2 or DNA polymerase proteins have
 CC been shown to be effective in therapy, prophylaxis and diagnosis of CMV

CC infection. The ONs may be modified to reduce nuclease resistance and to
 CC increase their efficacy. Modifications include phosphorothioate
 CC backbones, alkyl and halogen- substituted sugar moieties at the 2',
 CC position. (Updated on 25-MAR-2003 to correct PF field.)
 XX
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 130 CGGATGAAGAAGATCAACG 149
 DB 21 CGCAAGAAGAAGCAACG 2
 RESULT 388
 AAT12031
 ID AAT12031 standard; DNA; 21 BP.
 XX
 AC AAT12031;
 XX
 DT 25-MAR-2003 (revised)
 DT 13-MAR-1996 (first entry)
 XX
 DE CMV IE2 target gene sequence for antisense oligonucleotides.
 XX
 KW antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
 KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
 XX
 OS Synthetic.
 XX
 PN US5442049-A.
 XX
 PD 15-AUG-1995.
 XX
 PF 25-JAN-1993; 93US-00009263.
 XX
 PR 19-NOV-1992; 92US-00927506.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Baker B, Draper K, Anderson K;
 XX WPI; 1995-292538/38.
 DR
 XX
 PT New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
 PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
 PT treatment of CMV diseases.
 XX
 PS Disclosure; Col 7-8; 66pp; English.
 XX
 CC AAT12008-31 are selected target sites of the cytomegalovirus (CMV) genome
 CC suitable for targeting antisense oligonucleotides (ONs). This target
 CC sequence covers part of the nuclear localisation signal 2 of intermediate
 CC early (IE) complex 2 gene. Antisense ONs targeting CMV DNA or RNA coding
 CC for the IE1, IE2 or DNA polymerase proteins have been shown to be
 CC effective in therapy, prophylaxis and diagnosis of CMV infection. The ONs
 CC may be modified to reduce nuclease resistance and to increase their
 CC efficacy. Modifications include phosphorothioate backbones, alkyl and
 CC halogen-substituted sugar moieties at the 2' position. (Updated on 25-MAR
 CC -2003 to correct PF field.)
 XX
 SQ Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 130 CGGATGAAGAAGATCAACG 149
 DB 1 CGCAAGAAGAAGCAACG 20

RESULT 389
 AAT01647/c
 ID AAT01647 standard; DNA; 21 BP.
 XX
 AC AAT01647;
 XX
 DT 17-DEC-1995 (first entry)
 XX
 DE Peptide nucleic acid targetting CMV IE2 nuc sig 2.
 XX
 KW peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
 KW antiviral; diagnostic; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_feature 1..21
 FT /*tag= a
 FT /note= "at least one (and preferably all) of the backbone
 FT subunits are composed of amide units, so that the
 FT oligomer consists of the nucleobases attached covalently
 FT to a polyamide backbone"
 XX
 PN W09504748-A1.
 XX
 PD 16-FEB-1995.
 XX
 PF 09-AUG-1994; 94WO-US009039.
 XX
 PR 09-AUG-1993; 93US-00104438.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsert LM;
 XX
 DR WPI; 1995-090841/12.
 XX
 PT New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
 PT papilloma-virus are stable anti-sense molecules with high affinity for
 PT single stranded DNA, used for treating infections.
 XX
 PS Claim 2; Page 43; 65pp; English.
 XX
 CC New oligomers are claimed which (A) have at least one peptide nucleic
 CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'
 CC untranslated region, intron/exon (I/E) junction or coding sequence of
 CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
 CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
 CC papillomavirus. The PNAs can be used to target RNA and single stranded
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence
 CC they may be used therapeutically for modulating cytomegalovirus and
 CC papillomavirus processes and also as diagnostics (e.g., as probes for
 CC specific mRNAs). PNA oligomers have high affinity for complementary
 CC single stranded DNA. They are also able to form triple helices in which a
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds
 CC with the resulting double helix or with the first PNA strand. The PNAs
 CC possess no significant charge and are water soluble, which facilitates
 CC cellular uptake. Further, since they contain amides of non-biological
 CC amino acids, they are biostable and resistant to enzymatic degradation by
 CC proteases. The present sequence targets CMV IE2 nuclear localisation
 CC signal 2
 XX
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 130 CGGATGAAGAGATCAACG 149
 ||| |||||
 DB 21 CGCAAGAAGAGAGCAACG 2

RESULT 390
 AAT01703
 ID AAT01703 standard; DNA; 21 BP.
 XX
 AC AAT01703;
 XX
 DT 17-DEC-1995 (first entry)
 XX
 DE Peptide nucleic acid targetting CMV IE2 nuc sig 2.
 XX
 KW peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
 KW antiviral; diagnostic; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_feature 1..21
 FT /*tag= a
 FT /note= "at least one (and preferably all) of the backbone
 FT subunits are composed of amide units, so that the
 FT oligomer consists of the nucleobases attached covalently
 FT to a polyamide backbone"
 XX
 PN W09504748-A1.
 XX
 PD 16-FEB-1995.
 XX
 PF 09-AUG-1994; 94WO-US009039.
 XX
 PR 09-AUG-1993; 93US-00104438.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsert LM;
 XX
 DR WPI; 1995-090841/12.
 XX
 PT New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
 PT papilloma-virus - are stable anti-sense molecules with high affinity for
 PT single stranded DNA, used for treating infections.
 XX
 PS Claim 2; Page 45; 65pp; English.
 XX
 CC New oligomers are claimed which (A) have at least one peptide nucleic
 CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'
 CC untranslated region, intron/exon (I/E) junction or coding sequence of
 CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
 CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
 CC papillomavirus. The PNAs can be used to target RNA and single stranded
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence
 CC they may be used therapeutically for modulating cytomegalovirus and
 CC papillomavirus processes and also as diagnostics (e.g., as probes for
 CC specific mRNAs). PNA oligomers have high affinity for complementary
 CC single stranded DNA. They are also able to form triple helices in which a
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds
 CC with the resulting double helix or with the first PNA strand. The PNAs
 CC possess no significant charge and are water soluble, which facilitates
 CC cellular uptake. Further, since they contain amides of non-biological
 CC amino acids, they are biostable and resistant to enzymatic degradation by
 CC proteases. The present sequence targets CMV IE2 nuclear localisation
 CC signal 2
 XX
 SQ Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 130 CGGATGAAGAGATCAACG 149
 ||| |||||
 DB 1 CGCAAGAAGAGAGCAACG 20

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RESULT 391
AAAT05682/c
ID AAAT05682 standard; DNA; 21 BP.
XX
AC AAAT05682;
DT
DT 06-JUN-1996 (first entry)
XX
DE Antisense oligonucleotide ISIS 2922 targetted to CMV IE2.
XX
KW Antisense oligonucleotide; ISIS 2922; cytomegalovirus; CMV;
KW immediate early 2 mRNA; IE2; human; HCMV; CMV retinitis; blindness; HIV;
KW ss.
XX
OS Synthetic.
XX
PN WO9528941-A1.
XX
PD 02-NOV-1995.
XX
PF 24-APR-1995; 95WO-US005007.
XX
PR 26-APR-1994; 94US-00233711.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Draper KG, Chapman SK, Kisner DL;
XX
DR WPI; 1995-382835/49.
XX
PT Anti-sense oligo-nucleotide against the CMV immediate early 2 gene -
PT useful for treatment of cytomegalovirus infections, esp. retinitis.
XX
PS Claim 1; Page 24; 32pp; English.
XX
CC This sequence represents an antisense oligonucleotide ISIS 2922 which is
CC targetted to the cytomegalovirus (CMV) immediate early 2 (IE2) mRNA. The
CC IE2 protein is capable of transcriptionally activating proteins of
CC cellular and viral origin and is thought to be one of the "master
CC switches" of human CMV (HCMV) gene expression. Therefore disruption of
CC the IE2 mRNA will lead to a reduction in HCMV infectivity. This
CC oligonucleotide may esp. be used in a human medicine to halt progression
CC of CMV retinitis which can cause blindness in immunocompromised, e.g.
CC HIV, patients. It has an additive effect with ganciclovir or foscarnet,
CC and is not adversely affected by AZT or ddC
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAAGACCAACG 2
RESULT 392
AAAT07112/c
ID AAAT07112 standard; cDNA; 21 BP.
XX
AC AAAT07112;
XX
DT 25-JUN-1996 (first entry)
XX
DE IE2 translational start inhibitor IE (ISIS).
XX
KW Inhibitor; cytomegalovirus; human; antisense oligonucleotide; HCMV;
KW regulatory protein; general transcriptional activator; DNA replication;
KW orilyt-dependent viral replication; phosphorothioate linkage; CMV; IE2;
KW 2-O-methyl linkage; alkylphosphonate linkage; replication deficient;
KW immediate early; ss.

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XX Synthetic.
OS WO9532213-A1.
PN
XX 30-NOV-1995.
PD
XX 19-MAY-1995; 95WO-US006160.
PF
XX 25-MAY-1994; 94US-00249386.
PR
XX (HYBR-) HYBRIDON INC.
PA
XX Pari GS;
XX
XX WPI; 1996-020525/02.
DR
XX Synthetic oligo:nucleotide(s) that hybridise to cytomegalovirus (CMV) DNA
XX - inhibit CMV gene expression, useful for treating or preventing human
XX CMV infection.
XX
XX Disclosure; Page 23; 64pp; English.
XX
CC AAT07089-T07112 represent antisense oligonucleotides directed against
CC regions of the human cytomegalovirus (HCMV) genome. This sequence targets
CC the immediate early 2 (IE2) translational start site. All of the targeted
CC genes are required for orilyt-dependent viral replication. These
CC sequences therefore inhibit HCMV DNA replication by hybridising to these
CC genes under normal physiological conditions. Preferably, these sequences
CC are modified to contain at least 1 internucleotide linkage selected from
CC phosphorothioate, 2-O-methyl, and alkylphosphonate linkages. As these
CC sequences inhibit DNA replication, they can be used in compositions to
CC treat or prevent HCMV infection in a cell. The replication deficient CMV
CC strains that can be produced using these sequences will be useful for the
CC study of CMV in the absence of mutant strains
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAAGACCAACG 2
RESULT 393
AAAX36470/c
ID AAAX36470 standard; DNA; 21 BP.
XX
AC AAAX36470;
XX
DT 06-JUL-1999 (first entry)
XX
DE Chimeric 2'-O-methyl oligo for CMV replication inhibition.
XX
KW RNaseH; RNA cleavage; DNA cleavage; hybridisation; protein kinase C gene;
KW gene expression modulation; ras; raf; therapy; AIDS; atherosclerosis;
KW infection; cell growth; ss.
XX
OS Synthetic.
XX
PN WO9730067-A1.
XX
PD 21-AUG-1997.
XX
PF 07-FEB-1997; 97WO-US002043.
XX
PR 14-FEB-1996; 96US-0011620P.
XX
PA (ISIS-) ISIS PHARM INC.
XX (NOVS ) NOVARTIS AG.

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XX Cook PD, Monia B, Altmann K, Martin P;
XX WPI; 1997-424968/39.
XX
XX Oligo:nucleotide with RNaseH activity, which specifically hybridises to
PT DNA or RNA - comprises 1st and 2nd sub:sequence(s) having 2'-O-CH2-CH2-O-
PT CH3 and 2'-deoxy sugar moieties, useful for therapy or diagnosis.
XX
XX Example 22; Page 47; 86pp; English.
XX
XX This sequence is an example of an oligonucleotide of the invention, and
CC is an inhibitor of CMV replication. The invention relates to
CC oligonucleotides (A), which specifically hybridises to RNA or DNA,
CC comprises a linear sequence of nucleotide units linked by phosphodiester
CC or phosphorothioate linkages, comprising a first subsequence having 2'-O-
CC CH2-CH2-O-CH3 sugar moieties, and a second subsequence having 2'-deoxy
CC sugar moieties. (A), which has RNaseH activity for cleaving a
CC complementary strand, can be used to modulate the expression of ras, raf
CC and protein kinase C genes, useful in the therapy of AIDS,
CC atherosclerosis, bacterial or other infections, or to control aberrant
CC cell growth in humans, animals or plants. (A) can also be used
CC diagnostically, particularly when labelled, to detect overexpression of
CC mRNA or expression of abnormal RNA, including imaging of tissue sections,
CC and as a research reagent. (A) has increased binding affinity for
CC complementary strands (attributable to the 2'-O-CH2-CH2-O-CH3 sugar
CC moiety, which overcomes the loss of affinity caused by altered intersugar
CC links), and increased resistance to nuclease (from the modified links and
CC the 2'-O-CH2-CH2-O-CH3 sugar moiety)
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 130 CGGATGAAGAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2
||| ||||| |||||
RESULT 394
AAAX36471/c
ID AAAX36471 standard; DNA; 21 BP.
XX AC AAAX36471;
XX
XX 06-JUL-1999 (first entry)
XX Chimeric 2'-O-methyl oligo for CMV replication inhibition.
XX
XX RNaseH; RNA cleavage; DNA cleavage; hybridisation; protein kinase C gene;
KW gene expression modulation; ras; raf; therapy; AIDS; atherosclerosis;
KW infection; cell growth; ss.
XX Synthetic.
XX
XX WO9730067-A1.
XX
XX 21-AUG-1997.
XX
XX 07-FEB-1997; 97WO-US002043.
XX
XX 14-FEB-1996; 96US-0011620P.
XX (ISIS-) ISIS PHARM INC.
XX (NOVS) NOVARTIS AG.
XX Cook PD, Monia B, Altmann K, Martin P;
XX WPI; 1997-424968/39.
XX
XX Oligo:nucleotide with RNaseH activity, which specifically hybridises to
PT

PT DNA or RNA - comprises 1st and 2nd sub:sequence(s) having 2'-O-CH2-CH2-O-
PT CH3 and 2'-deoxy sugar moieties, useful for therapy or diagnosis.
XX
XX Example 22; Page 47; 86pp; English.
XX
XX This sequence is an example of an oligonucleotide of the invention, and
CC is an inhibitor of CMV replication. The invention relates to
CC oligonucleotides (A), which specifically hybridises to RNA or DNA,
CC comprises a linear sequence of nucleotide units linked by phosphodiester
CC or phosphorothioate linkages, comprising a first subsequence having 2'-O-
CC CH2-CH2-O-CH3 sugar moieties, and a second subsequence having 2'-deoxy
CC sugar moieties. (A), which has RNaseH activity for cleaving a
CC complementary strand, can be used to modulate the expression of ras, raf
CC and protein kinase C genes, useful in the therapy of AIDS,
CC atherosclerosis, bacterial or other infections, or to control aberrant
CC cell growth in humans, animals or plants. (A) can also be used
CC diagnostically, particularly when labelled, to detect overexpression of
CC mRNA or expression of abnormal RNA, including imaging of tissue sections,
CC and as a research reagent. (A) has increased binding affinity for
CC complementary strands (attributable to the 2'-O-CH2-CH2-O-CH3 sugar
CC moiety, which overcomes the loss of affinity caused by altered intersugar
CC links), and increased resistance to nuclease (from the modified links and
CC the 2'-O-CH2-CH2-O-CH3 sugar moiety)
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 130 CGGATGAAGAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2
||| ||||| |||||
RESULT 395
AAT49210/c
ID AAT49210 standard; DNA; 21 BP.
XX AC AAT49210;
XX
XX 02-JUL-2002 (revised)
XX 03-SEP-1997 (first entry)
XX Phosphorothioate oligonucleotide ISIS-2922.
XX
XX phosphorothioate; therapeutic; RNase H activity; ras; antisense;
KW inhibit translation; treating; hepatitis; inflammatory disease;
KW intercellular cell adhesion factor; ICAM-1; cytomegalovirus retinitis;
KW cancer; protein kinase C alpha; c-raf; Ha-ras; Ki-ras; AIDS; Chiral;
KW thermodynamic stability; hepatitis C virus; ss.
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..21
FT /tag= a
FT /note= "phosphorothioate 3' to 5' linkages"
XX
XX WO9639154-A1.
XX
XX 12-DEC-1996.
XX
XX 05-JUN-1996; 96WO-US008757.
XX
XX 06-JUN-1995; 95US-00466692.
XX 06-JUN-1995; 95US-00467597.
XX 06-JUN-1995; 95US-00468447.
XX 06-JUN-1995; 95US-00468569.
XX 06-JUN-1995; 95US-00469851.
XX 06-JUN-1995; 95US-00470129.
XX 06-JUN-1995; 95US-00471966.
XX 06-JUN-1995; 95US-00471967.

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XX (ISIS-) ISIS PHARM INC.
XX Cook PD, Hoke G;
XX WPI; 1997-042838/04.
XX Sequence-specific oligo:nucleotide(s) useful in anti-sense therapy -
XX contain phosphorothioate linkages of high chiral purity, also used to
XX induce RNase H activity.
XX Claim 1; Page 22; 49pp; English.
XX AAT49204-14 are oligonucleotides where at least 75 % of the nucleoside
XX units are joined together by Sp or Rp phosphorothioate 3' to 5' linkages.
XX The oligonucleotides are useful therapeutically, e.g. by eliciting RNase
XX H activity has antisense molecules to inhibit translation. Uses of the
XX oligos include treating hepatitis, inflammatory diseases mediated by
XX intercellular cell adhesion factor ICAM-1 and cytomegalovirus retinitis,
XX as well as treatment of cancers mediated by protein kinase C alpha, c-raf
XX kinase, Ha-ras or Ki-ras and treating AIDS. The sequence-specific
XX phosphorothioate oligonucleotides have substantially chirally pure
XX intersugar linkages which increase the thermodynamic stability of
XX heteroduplexes with target RNA and DNA. The present sequence is used in
XX the treatment of cytomegalovirus retinitis. (Updated on 02-JUL-2002 to
XX add missing PA field.)
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAACG 149
DB 21 CGCAGAGAAGAGCAAAACG 2

RESULT 396
AAT90843/C
ID AAT90843 standard; DNA; 21 BP.
XX AAT90843;
XX 14-APR-1998 (first entry)
XX Anti-cytomegalovirus activity oligonucleotide ISIS 2922.
XX Human; cytomegalovirus; infection; antiviral; CMV; diagnosis;
XX chemical modification; phosphorothioate; ss.
XX Synthetic.
XX Key Location/Qualifiers
XX modified_base 1..21
XX /*tag= a
XX /note= "Phosphorothioate linkages"
XX WO9733992-A1.
XX 18-SEP-1997.
XX 14-MAR-1997; 97WO-USO04235.
XX 14-MAR-1996; 96US-00615801.
XX (HYBR-) HYBRIDON INC.
XX Pari GS;
XX WPI; 1997-479898/44.
XX Modified oligo:nucleotide(s) with antiviral activity - used to treat or
prevent human cytomegalovirus infections.
Disclosure; Page 7; 31pp; English.
The present sequence represents a chemically modified oligonucleotide
with antiviral activity against human cytomegalovirus (CMV). The
chemically modified oligonucleotide is targeted to the UL36/37 gene of
CMV, and is used to treat or prevent human CMV infections. Also, the
chemically modified oligonucleotide can be used as a diagnostic probe to
detect CMV in clinical and experimental samples. Compared with known anti
-CMV antisense molecules the chemically modified oligonucleotide is more
active, and more stable in vivo (allowing reduction in dose or less
frequent administration). It has better bioavailability to target organs
and tissues, and is less toxic (in trials, humans tolerated 2 hour
infusion of 0.5 mg/kg without toxicity)
Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAACG 149
DB 21 CGCAGAGAAGAGCAAAACG 2

RESULT 397
AAT51074/C
ID AAT51074 standard; DNA; 21 BP.
XX AAT51074;
XX 25-MAR-2003 (revised)
XX 13-MAR-1997 (first entry)
XX ISIS-2922, cytomegalovirus inhibitor.
XX RNA transcription inhibitor; hepatitis C virus; HCV; inflammation; AIDS;
XX phosphorothioate oligonucleotide; primer; nuclease; RNaseH; therapy;
XX thermodynamic stability; cytomegalovirus infection; cancer; ss.
XX Synthetic.
XX US5576302-A.
XX 19-NOV-1996.
XX 06-JUN-1995; 95US-00468447.
XX 15-OCT-1991; 91US-00777670.
XX 16-OCT-1991; 91US-00777007.
XX 05-MAY-1993; 93US-00058023.
XX 29-AUG-1994; 94US-00297703.
XX (ISIS-) ISIS PHARM INC.
XX Cook PD, Hoke G;
XX WPI; 1997-011289/01.
XX New oligo:nucleotide(s) for inhibiting transcription of hepatitis C virus
XX RNA - contain diastereomerically pure phosphorothioate links for
XX formation of more stable complexes with target nucleic acid.
XX Example 12; Col 19; 18pp; English.
XX AAT51073-T51079 represent inhibitors of the invention. This sequence can
XX be used in the treatment of cytomegalovirus retinitis. 75-100 % of the
XX nucleotides in these sequences are preferably joined by either Sp or Rp
XX phosphorothioate 3' to 5' links. To create these sequences, 2'-
XX deoxyribonucleoside-5'-O-(1-thiophosphate) (dNTPalpaS) is prepared as a
XX racemic mixture, and the pure Sp and Rp diastereomers are isolated (such

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as by reverse-phase HPLC on ODS Hypersil). The chiral products are then used to make these sequences enzymatically in the presence of a template, primer, and nuclease. Alternatively these sequences can be chemically synthesized. Oligonucleotides with chirally pure intersugar links form heteroduplexes with target RNA or DNA of greater thermodynamic stability (compared with racemic mixtures), and elicit RNaseH activity. Chirally pure oligonucleotides also have a better resistance to nuclease digestion. As these sequences inhibit HCV RNA transcription, they can be used as therapeutic, diagnostic, and research agents. More generally, chirally pure phosphorothioate oligonucleotides can be used as therapeutic agents in the same way as racemic (or non-sulphur substituted) compounds, such as to treat AIDS, inflammation, cytomegalovirus infection, and various cancers. (Updated on 25-MAR-2003 to correct PF field.)

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGACATCAACG 149

Db 21 CGCAAGAGAGAGCAACG 2

RESULT 398

AAV70321/C

ID AAV70321 standard; DNA; 21 BP.

XX AC AAV70321;

XX DT 05-FEB-1999 (first entry)

XX DE CMV gene oligomeric molecule probe #1.

XX KW CMV; human; cytomegalovirus; restenosis; angioplasty; atherectomy;
XX KW hybridisation; probe; oligomeric molecule; morpholino; HMCV;
XX KW phosphoramidate; ss.

XX OS Synthetic.

XX OS Human herpesvirus 5.

XX FH Key Location/Qualifiers

XX FT modified_base 1..21

XX FT /+tag= a

XX FT /note= "preferably phosphoramidate linkages"

XX PN W09846740-A1.

XX PD 22-OCT-1998.

XX PF 16-APR-1998; 98WO-US007866.

XX PR 17-APR-1997; 97US-0043274P.

XX PA (ANTI-) ANTIVIRALS INC.

XX PI Burger DR;

XX DR WPI; 1998-594572/50.

XX PT Inhibiting restenosis using oligonucleotide binding to cytomegalovirus
XX PT nucleic acid - useful for, e.g. preventing cytomegalovirus replication,
XX PT particularly after angioplasty or atherectomy.

XX PS Claim 8; Page 15; 24pp; English.

XX CC The present invention describes a method for inhibiting restenosis, in a
XX CC subject infected with cytomegalovirus (CMV) who has undergone, or is
XX CC undergoing, angioplasty or atherectomy. The method comprises
XX CC administering an oligonucleotide that hybridises to at least part of a
XX CC target sequence in a CMV gene. The oligonucleotide comprises purine and

CC pyrimidine bases that hybridise to corresponding bases in the target,
CC connected by 5-7 atom cyclic backbone groups. The oligonucleotides are
CC used to inhibit CMV replication, which is implicated in proliferation of
CC smooth muscle cells. They are particularly administered at the site of
CC injury but oral and parental administration are also contemplated.
CC Typically the dose is 1-25 (preferably 2-15) micro mole, or when included
CC in a delivery device, 30-3000 (preferably 300-1500) micro g/cm2 of
CC surface area being treated. Compared with sugar-based oligonucleotides,
CC the oligonucleotides of the present invention have higher affinity for
CC target RNA and better resistance to nucleases. Also the target-
CC oligonucleotide duplex formed is not unwound in the cell and since the
CC oligonucleotides are uncharged they enter cells more easily. Delivering
CC the oligonucleotides from balloon catheters or stents provides a high
CC concentration at the target site. AAV70321 to AAV70332 represent
CC specifically claimed examples of the oligonucleotides from the present
CC invention

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGACATCAACG 149

Db 21 CGCAAGAGAGAGCAACG 2

RESULT 399

AAV62909

ID AAV62909 standard; DNA; 21 BP.

XX AC AAV62909;

XX DT 13-JAN-1999 (first entry)

XX DE Human galactokinase cDNA PCR primer #3.

XX KW Galactokinase; human; mutation; detection; diagnosis; treatment;
XX KW deficiency; PCR primer; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN US5830649-A.

XX PD 03-NOV-1998.

XX PF 26-MAY-1995; 95US-00451778.

XX PR 26-MAY-1995; 95US-00451778.

XX PA (SMIK) SMITHKLINE BEECHAM CORP.

XX PI Bergsma DJ, Stambolian DE;

XX DR WPI; 1998-609232/51.

XX PT Detection of galactokinase mutations - based on comparison with wild-type
XX PT gene sequence or altered galactokinase activity.

XX PS Example 1; Col 35-36; 31pp; English.

XX CC AAV62907-V62927 are PCR primers used in the amplification of a novel
XX CC human galactokinase. This protein is used in a method to detect
XX CC galactokinase mutations. This protein and its encoding nucleic acid can
XX CC be used in methods allowing the detection, diagnosis and treatment of
XX CC human galactokinase deficiency

SQ Sequence 21 BP; 3 A; 9 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 927 CCAGCTGCTCCGCTGGCTGG 946
 DB 2 CCAGCAGCTCCGCGACCTGG 21

RESULT 400
 AAV28268/c
 ID AAV28268 standard; DNA; 21 BP.
 XX AC
 XX AAV28268;
 DT 08-OCT-1998 (first entry)
 XX
 DE Antisense oligonucleotide to Cytomegalovirus.
 XX
 KW Purification; oligonucleotide; matrix; affinity unit; Cytomegalovirus;
 KW affinity purification; antisense; influenza virus; CMV; ss.
 XX
 OS Synthetic.
 OS Cytomegalovirus.
 XX
 PN WO9827425-Al.
 XX
 PD 25-JUN-1998.
 XX
 PF 18-DEC-1997; 97WO-US023284.
 XX
 PR 19-DEC-1996; 96US-00769951.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Chen D, Srivatsa GS, Cole DL;
 XX
 DR WPI; 1998-362922/31.
 XX
 PT Matrix for selective separation of oligo:nucleotide - useful for, e.g.
 PT large scale purification of anti-sense agents from their deletion
 PT derivatives formed during synthesis.
 XX
 PS Disclosure; Page 157; 183pp; English.
 XX
 CC AAV28155-268 represent oligonucleotides which can be purified using the
 CC method of the invention. The specification describes a matrix that
 CC comprises a support and an affinity unit that specifically and reversibly
 CC binds a target oligonucleotide, and comprises a sequence of bases having
 CC the reverse complement of a hybridising portion of the target
 CC oligonucleotide. The matrix is used for affinity purification of
 CC synthetic oligonucleotides, specifically antisense agents, for treatment
 CC of hyperproliferative diseases, for treating a non-pathogen, non-
 CC hyperproliferative disease, e.g. Alzheimer's, for modulating expression
 CC of cell surface proteins, and to inhibit a eukaryotic pathogen,
 CC retrovirus or other viruses
 XX
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
 DB 21 CGCAAGAGAGAGCAACG 2

RESULT 401
 AAV60725/c
 ID AAV60725 standard; DNA; 21 BP.
 XX AC
 XX AAV60725;
 DT 08-DEC-1998 (first entry)

XX DE
 XX
 KW PCR primer; amplification; yeast; UAS; upstream activation sequence;
 KW transcription terminator; cell cycle; Upstream Activation Sequence; UAS;
 KW promoter; phosphorylation; cyclin; cyclin-dependent kinase; CDK; vector;
 KW cyclin kinase inhibitor; CKI; growth; wound healing; cancer therapy; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9816660-Al.
 XX
 PD 23-APR-1998.
 XX
 PF 16-OCT-1997; 97WO-US018608.
 XX
 PR 16-OCT-1996; 96US-0029127P.
 XX
 PR 27-NOV-1996; 96US-0031968P.
 XX
 PA (BITT-) BITTECH INC.
 XX
 PI Bitter GA;
 XX
 DR WPI; 1998-251302/22.
 XX
 XX
 PT Screening for agents that effect cell cycle regulatory proteins - using a
 PT cell line that expresses a reporter gene in response to regulation
 PT through phosphorylation by a cyclin/CDK system.
 XX
 PS Example 4; Page 68; 93pp; English.
 XX
 CC Primers AAV60724-V60725 were used to PCR amplify codons 1-151 of the
 CC human cyclin-dependent kinase 2 (hCDK2). The amplified product was used
 CC to generate a fusion protein comprising part of the hCDK2 sequence linked
 CC to codons 155-302 of the yeast PHO85 gene. The fusion protein is used to
 CC screen for compounds that affect mammalian cell cycle regulatory
 CC proteins. The method comprises administering a compound to a cell line,
 CC which contains a reporter gene linked to an Upstream Activation Sequence
 CC (UAS) and a promoter, where the UAS binds a transcription control factor
 CC (TCF) which is regulated through cyclin/cyclin-dependent kinase (CDK)
 CC phosphorylation. Also included in the construct is an effector gene
 CC providing a gene product to permit normal cyclin/CDK regulation of the
 CC TCF. Expression of the reporter gene is then analysed in the cell line,
 CC thereby determining whether the compound affects the normal regulation.
 CC The method can be used to identify inhibitors and activators of mammalian
 CC cell cycle regulatory proteins, especially inhibitors and activators of
 CC cyclins, CDKs, cyclin/CDK complexes, cyclin kinase inhibitors (CKIs), and
 CC cyclin/CDK/CKI complexes. The identified agents can be used for
 CC stimulating growth of cells (as in wound healing), or regulating
 CC excessive cell growth and division (as in cancer therapy)
 XX
 SQ Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGGCCGAGC 1052
 DB 21 GACTTTGGACTGCCAGAGC 2

RESULT 402
 AAV40585/c
 ID AAV40585 standard; DNA; 21 BP.
 XX AC
 XX AAV40585;
 DT 21-DEC-1998 (first entry)
 XX
 DE Human TSC gene exon 10 forward primer hTSCex10.
 XX

KW Thiazide-sensitive Na-Cl cotransporter; TSC; hTSC gene; human;
 KW ion transport; Gitelman's syndrome; Bartter's syndrome;
 KW hypokalaemic alkalosis; hypocalciuria; hypomagnesaemia; diagnosis;
 KW therapy; SSCP; primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN W09829431-A1.
 XX
 PD 09-JUL-1998.
 XX
 PF 19-DEC-1997; 97WO-US023553.
 XX
 PR 31-DEC-1996; 96US-00778052.
 XX
 PA (UYUA) UNIV YALE.
 XX
 PI Lifton RP, Simon DB;
 XX
 DR WPI; 1998-388029/33.
 XX
 PT Thiazide sensitive cotransporter and ATP sensitive potassium channel
 PT genes - useful for developing products for the diagnosis and treatment of
 PT ion transport disorders, e.g. Gitelman's Syndrome or Bartter's Syndrome.
 XX
 PS Example 1; Page 51; 105pp; English.
 XX
 CC Primers hTSCex10 forward and reverse (see AAV40585 and AAV40586,
 CC respectively) are designed to amplify exon 10 of the human hTSC gene (see
 CC AAV40561) that codes for thiazide-sensitive Na-Cl cotransporter TSC (see
 CC AAV29682). Both primers are located within introns of hTSC. 27 Sets of
 CC specific primers (see AAV40565-V40618) were used for SSCP analysis of
 CC hTSC. Amplified products were analysed for molecular variants by
 CC electrophoresis, and identified variants were sequenced. Complete linkage
 CC of Gitelman's syndrome with TSC was demonstrated. Identification of the
 CC molecular basis of Gitelman's syndrome allows for the genetic diagnosis
 CC of this disorder. The invention provides products and methods useful for
 CC diagnosis and treatment of Gitelman's syndrome and other ion transport
 CC disorders
 XX
 SQ Sequence 21 BP; 9 A; 1 C; 10 G; 1 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 1689 CTTCCCTGCTTACTCTCTGCC 1708
 Db 21 CTTCCCTGCTTACTCTCTGCC 2
 RESULT 403
 AAX17948
 ID AAX17948 standard; DNA; 21 BP.
 XX
 AC AAX17948;
 XX
 DT 11-MAY-1999 (first entry)
 XX
 DE CMV target sequence in immediate early gene region.
 XX
 KW Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
 KW cytomegalovirus; inhibition; replication; sugar modification;
 KW phosphorothioate; infection; retinitis; ss.
 XX
 OS Human herpesvirus 5.
 OS
 PN W09845314-A1.
 XX
 PD 15-OCT-1998.
 XX
 PF 07-APR-1998; 98WO-US006895.

XX
 PR 09-APR-1997; 97US-00838715.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Draper KG, Kisner DL, Anderson KP, Chapman S;
 XX
 DR WPI; 1998-568330/48.
 XX
 PT New antisense oligonucleotides that target cytomegalovirus nucleic acid -
 PT particularly including 2-methoxyethoxy sugar modifications, especially
 PT for treating viral retinitis, with long-lasting retention in the retina.
 XX
 PS Disclosure; Page 23; 99pp; English.
 XX
 CC Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic
 CC acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
 CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
 CC replication. The sequence shown here represents the target site in the
 CC IE2 gene region and corresponds to the nuclear localisation signal 2
 CC sequence. Optionally the oligonucleotides include at least one 2'-(2-
 CC methoxyethoxy) sugar modification or phosphorothioate internucleotide
 CC linkages. The oligonucleotides are used to inhibit CMV infections (by in
 CC vivo or in vitro contact with cells, tissues or body fluids), especially
 CC to treat or prevent CMV infections, particularly retinitis
 XX
 SQ Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 130 CGGATGAGAGATCAACG 149
 Db 1 CGCAAGAAGAGCAACG 20
 RESULT 404
 AAX15075/C
 ID AAX15075 standard; DNA; 21 BP.
 XX
 AC AAX15075;
 XX
 DT 20-MAR-2003 (revised)
 DT 16-APR-1999 (first entry)
 XX
 DE CMV antisense chimeric oligonucleotide of the invention.
 XX
 KW Nuclease resistant; ribofuranosyl moiety; 2'-aminoalkoxy; tumour;
 KW 2'-imidazolylalkoxy; modulation; activity; AIDS; atherosclerosis;
 KW phosphorothioate; DNA-RNA hybrid; ss.
 XX
 OS Synthetic.
 OS
 XX
 FT Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /note= "phosphorothioated"
 FT misc_RNA 4..5
 FT /*tag= b
 FT misc_RNA 17..18
 FT /*tag= c
 XX
 XX US5872232-A.
 PN
 XX 16-FEB-1999.
 PD
 XX 06-JUN-1995; 95US-00471973.
 PF
 XX 11-JAN-1990; 90US-00463358.
 PR 13-AUG-1990; 90US-00566977.
 PR 12-AUG-1991; 91WO-US005720.
 PR 05-MAR-1992; 92US-00835932.

```
PR 01-JUL-1992; 92US-00854634.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Cook PD, Kawasaki AM;
XX
XX WI 1999-166721/14.
XX
XX DR New 2'-O-modified oligo-nucleotide(s) - comprising nucleotide(s)
XX FT comprising a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent, used for
XX PT hybridisation to RNA or DNA.
XX
XX PS Example 34; Col 53; 48pp; English.
XX
XX CC The present oligonucleotide exemplifies the oligonucleotides of the
XX CC invention. Oligonucleotides of the invention are nuclease resistant, and
XX CC comprise covalently-bound nucleosides that individually include a ribose
XX CC or deoxyribose sugar portion and base portion where the nucleosides are
XX CC joined together by internucleoside linkages such that the base portion of
XX CC the nucleosides form a mixed base sequence that is complementary to a RNA
XX CC base sequence or to a DNA base sequence. At least one of the nucleosides
XX CC has a modified ribofuranosyl moiety bearing a 2'-aminoalkoxy or 2'-
XX CC imidazolylalkoxy substituent. The nuclease resistant compounds can be
XX CC used for modulating the activity of DNA or RNA. They can be used for
XX CC treating organisms having a disease characterised by the undesired
XX CC production of a protein. Diverse organisms such as bacteria, yeast,
XX CC protozoa, algae, plant and higher animal forms including warm-blooded
XX CC animals can be treated in this manner. The compounds can be used for
XX CC treating e.g. AIDS, atherosclerosis or tumours. They can also be used in
XX CC diagnostic methods for detecting the presence or absence of abnormal RNA
XX CC molecules, or abnormal or inappropriate expression of normal RNA
XX CC molecules in organisms or cells. (Updated on 20-MAR-2003 to correct PR
XX CC field.)
XX
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 130 CGGATGAGAGAGATCAACG 149
Db ||| ||||| |||||
21 CGCAGAGAGAGAGCAACG 2

RESULT 405
AAAX15076/c
ID AAAX15076 standard; DNA; 21 BP.
XX
XX AC AAAX15076;
XX
XX DT 20-MAR-2003 (revised)
XX DT 16-APR-1999 (first entry)
XX
XX DE CMV antisense chimeric oligonucleotide of the invention.
XX
XX KW Nuclease resistant; ribofuranosyl moiety; 2'-aminoalkoxy; tumour;
XX KW 2'-imidazolylalkoxy; modulation; activity; AIDS; atherosclerosis;
XX KW phosphorothioate; DNA-RNA hybrid; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /note= "phosphorothioated"
XX FT misc_RNA 4..6
XX FT /*tag= b
XX FT misc_RNA 15..18
XX FT /*tag= c
XX
XX PN US5872232-A.
XX
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PD 16-FEB-1999.
XX
XX PF 06-JUN-1995; 95US-00471973.
XX
XX PR 11-JAN-1990; 90US-00463358.
XX PR 13-AUG-1990; 90US-00566977.
XX PR 12-AUG-1991; 91WO-US005720.
XX PR 05-MAR-1992; 92US-00835932.
XX PR 01-JUL-1992; 92US-00854634.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PS Cook PD, Kawasaki AM;
XX
XX WI 1999-166721/14.
XX
XX DR New 2'-O-modified oligo-nucleotide(s) - comprising nucleotide(s)
XX FT comprising a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent, used for
XX PT hybridisation to RNA or DNA.
XX
XX PS Example 34; Col 53; 48pp; English.
XX
XX CC The present oligonucleotide exemplifies the oligonucleotides of the
XX CC invention. Oligonucleotides of the invention are nuclease resistant, and
XX CC comprise covalently-bound nucleosides that individually include a ribose
XX CC or deoxyribose sugar portion and base portion where the nucleosides are
XX CC joined together by internucleoside linkages such that the base portion of
XX CC the nucleosides form a mixed base sequence that is complementary to a RNA
XX CC base sequence or to a DNA base sequence. At least one of the nucleosides
XX CC has a modified ribofuranosyl moiety bearing a 2'-aminoalkoxy or 2'-
XX CC imidazolylalkoxy substituent. The nuclease resistant compounds can be
XX CC used for modulating the activity of DNA or RNA. They can be used for
XX CC treating organisms having a disease characterised by the undesired
XX CC production of a protein. Diverse organisms such as bacteria, yeast,
XX CC protozoa, algae, plant and higher animal forms including warm-blooded
XX CC animals can be treated in this manner. The compounds can be used for
XX CC treating e.g. AIDS, atherosclerosis or tumours. They can also be used in
XX CC diagnostic methods for detecting the presence or absence of abnormal RNA
XX CC molecules, or abnormal or inappropriate expression of normal RNA
XX CC molecules in organisms or cells. (Updated on 20-MAR-2003 to correct PR
XX CC field.)
XX
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 130 CGGATGAGAGAGATCAACG 149
Db ||| ||||| |||||
21 CGCAGAGAGAGAGCAACG 2

RESULT 406
AAAX11589/c
ID AAAX11589 standard; DNA; 21 BP.
XX
XX AC AAAX11589;
XX
XX DT 16-NOV-1999 (first entry)
XX
XX DE Fully modified phosphorothioate oligo seq ID No: 3.
XX
XX KW Phosphorus-linked oligomer; deprotection; protic acid; ether solvent;
XX KW hybridization probe; amplification primer; forensic; paleontology;
XX KW antisense agent; ss.
XX
XX OS Synthetic.
XX
XX PN WO9943694-A1.
XX
XX PD 02-SEP-1999.
XX
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PF 26-FEB-1999; 99WO-US004213.
XX
PR 26-FEB-1998; 98US-00032972.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Krotz AH, Ravikumar VT;
XX
DR WPI; 1999-540559/45.
XX
PT Use of aromatic solvents during deprotection of 5'-hydroxy groups in
XX solid phase synthesis of oligonucleotides.
XX
PS Example 5; Page 28; 42pp; English.
XX
CC The invention provides improved methods for synthesis of phosphorus-
CC linked oligomers. The method comprises deprotecting a 5'-hydroxy using a
CC protic acid in an aromatic, alkylaromatic, haloaromatic, halo-
CC alkylaromatic or aromatic ether solvent. The phosphorus-linked oligomers
CC particularly oligonucleotides, are useful as diagnostic or research
CC reagents, e.g. hybridization probes or amplification primers, useful in
CC forensics, paleontology, evolutionary studies, for screening expression
CC libraries, sequencing etc., or as therapeutic (antisense) agents for
CC inhibiting expression of genes or activity of transcription factors. The
CC aromatic solvents are less expensive to use than hazardous halogenated
CC alkanes since they do not require large investments in recycling
CC equipment to meet environmental standards for disposal. They are thus
CC better suited for large scale operations. Sequences AAZ11587-594
CC represent phosphorothioate oligomers synthesized using the new method of
CC the invention
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAAAACG 149
Db 21 CGCAGAGAAGAGCAAAACG 2

RESULT 407
AAAX33398/C
ID AAX33398 standard; DNA; 21 BP.
AC AAX33398;
XX
DT 29-JUN-1999 (first entry)
XX
DE Phosphorothioate 21-mer oligonucleotide #3.
XX
KW Phosphorothioate; sulphurised oligonucleotide; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..21
FT /*tag= a
FT /note= "phosphorothioate linkages"
XX
XX WO9919340-A1.
XX
XX 22-APR-1999.
XX
XX 13-OCT-1998; 98WO-US021502.
XX
XX 15-OCT-1997; 97US-00950779.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cole DL, Ravikumar VT, Cheruvallath ZS;
XX
XX

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DR WPI; 1999-287949/24.
XX
PT Preparation of Phosphorothioate oligonucleotides applicable throughout
XX nucleic acid chemistry.
XX
PS Example 3; Page 8; 17pp; English.
XX
CC The present invention describes a method for preparing phosphorothioate
CC oligonucleotides by phosphorylating the 5'-hydroxyl of a nucleic acid
CC moiety in an acetonitrile containing solvent mixture to form a phosphite
CC intermediate (II) and oxidizing (II) with an acetyl disulfide in an
CC acetonitrile containing solvent mixture to effect conversion of the
CC phosphite to phosphorothioate (III). The present sequence represents a
CC phosphorothioate oligonucleotide from an example of the present
CC invention. The method can be used to sulphurise oligonucleotides of 8-50
CC nucleotides. The method is widely applicable throughout nucleic acid
CC chemistry. The process allows formation of phosphorothioate linkages in
CC the oligonucleotides or derivatives, without the need for complex solvent
CC mixtures and repeated washing or solvent changes. The process uses a
CC simplified solvent system and produces oligonucleotides having
CC phosphorothioate groups with efficiency and improved yields
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAAAACG 149
Db 21 CGCAGAGAAGAGCAAAACG 2

RESULT 408
AAAX05474/C
ID AAX05474 standard; DNA; 21 BP.
AC AAX05474;
XX
DT 20-APR-1999 (first entry)
XX
DE Chimeric 2'-O-methyl antisense oligo 4326 for CMV.
XX
KW Nuclease resistant; modified; deoxyfuranosyl moiety; therapy; infection;
KW AIDS; atherosclerosis; tumour; CMV; antisense; DNA/RNA hybrid; ss.
XX
OS Synthetic.
OS Human herpesvirus 5.
XX
FH Key Location/Qualifiers
FT modified_base 1..21
FT /*tag= a
FT /note= "contains phosphorothioate linkages; 2' O-methyl
FT misc_RNA 1..21
FT /*tag= b
XX
XX US5859221-A.
XX
XX 12-JAN-1999.
XX
XX 06-JUN-1995; 95US-00468037.
XX
XX 11-JAN-1990; 90US-00463358.
XX
XX 13-AUG-1990; 90US-00566977.
XX
XX 12-AUG-1991; 91WO-US005720.
XX
XX 05-MAR-1992; 92US-00835932.
XX
XX 01-JUL-1992; 92US-00854634.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cook PD, Kawasaki AM;
XX
XX

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DR WPI; 1999-120005/10.
XX Nuclease resistant oligonucleotide analogues - having nucleosides
PT including modified deoxyfuranosyl moiety bearing 2'-substituent to
PT increase binding affinity.
XX Example 34; Col 54; 49pp; English.
PS The invention relates to a nuclease resistant compound that hybridises
CC with RNA or DNA. The compound comprises covalently-bound nucleosides that
CC individually include a ribose or deoxyribose sugar portion and a base
CC portion, where the nucleosides are joined together by internucleoside
CC linkages such that the base portion of the nucleosides form a mixed base
CC sequence that is complementary to a RNA base sequence or to a DNA base
CC sequence; and where at least 1 of the nucleosides included a modified
CC deoxyfuranosyl moiety bearing a 2'-substituent selected from cyano,
CC fluoromethyl, thioalkoxyl, alkylsulphinyl, alkylsulphonyl, allyloxy and
CC alkeneoxy groups. The nuclease resistant oligonucleotides (ONs) can bind
CC to and modulate the activity of DNA or RNA and can be used for treating
CC organisms having a disease characterised by the undesired production of a
CC protein. They can be used in therapeutic or prophylactic treatment in
CC organisms such as bacteria, yeast, protozoa, algae, plant and higher
CC animal forms including warm-blooded animals. The ONs can also be used for
CC treating infections, AIDS, atherosclerosis or tumours. The products can
CC be used for detection and diagnosis. The ONs provide enhanced binding to
CC targets. Increased binding of 2'-sugar modified sequence-specific ONs
CC provides superior potency and specificity compared to phosphorus-modified
CC ONs. The present sequence represents a chimeric antisense oligo for CMV
XX Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 409
AAK05473/c
ID AAK05473 standard; DNA; 21 BP.
XX AAK05473;
AC AAK05473;
DT 20-APR-1999 (first entry)
XX Chimeric 2'-O-methyl antisense oligo 4325 for CMV.
XX Nuclease resistant; modified; deoxyfuranosyl moiety; therapy; infection;
XX AIDS; atherosclerosis; tumour; CMV; antisense; DNA/RNA hybrid; ss.
XX Synthetic.
XX Human herpesvirus 5.
XX Key Location/Qualifiers
FT modified_base 1..21
FT /tag= a
FT /note= "contains phosphorothioate linkages; 2' O-methyl
FT modification on some base pairs"
FT misc_RNA 1..21
FT /tag= b
XX US5859221-A.
PN 12-JAN-1999.
PD 06-JUN-1995; 95US-00468037.
XX 11-JAN-1990; 90US-00463358.
PR 13-AUG-1990; 90US-00566977.
PR 12-AUG-1991; 91WO-US0005720.

05-MAR-1992; 92US-00835932.
01-JUL-1992; 92US-00854634.
(ISIS-) ISIS PHARM INC.
Cook PD, Kawasaki AM;
WPI; 1999-120005/10.
Nuclease resistant oligonucleotide analogues - having nucleosides
including modified deoxyfuranosyl moiety bearing 2'-substituent to
increase binding affinity.
Example 34; Col 54; 49pp; English.
The invention relates to a nuclease resistant compound that hybridises
with RNA or DNA. The compound comprises covalently-bound nucleosides that
individually include a ribose or deoxyribose sugar portion and a base
portion, where the nucleosides are joined together by internucleoside
linkages such that the base portion of the nucleosides form a mixed base
sequence that is complementary to a RNA base sequence or to a DNA base
sequence; and where at least 1 of the nucleosides included a modified
deoxyfuranosyl moiety bearing a 2'-substituent selected from cyano,
fluoromethyl, thioalkoxyl, alkylsulphinyl, alkylsulphonyl, allyloxy and
alkeneoxy groups. The nuclease resistant oligonucleotides (ONs) can bind
to and modulate the activity of DNA or RNA and can be used for treating
organisms having a disease characterised by the undesired production of a
protein. They can be used in therapeutic or prophylactic treatment in
organisms such as bacteria, yeast, protozoa, algae, plant and higher
animal forms including warm-blooded animals. The ONs can also be used for
treating infections, AIDS, atherosclerosis or tumours. The products can
be used for detection and diagnosis. The ONs provide enhanced binding to
targets. Increased binding of 2'-sugar modified sequence-specific ONs
provides superior potency and specificity compared to phosphorus-modified
ONs. The present sequence represents a chimeric antisense oligo for CMV
Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 410
AAK99984/c
ID AAK99984 standard; DNA; 21 BP.
XX AAK99984;
AC AAK99984;
DT 19-OCT-1999 (first entry)
XX Phosphorothioate oligonucleotide #3.
XX Phosphorothioate oligonucleotide; benzyl(thio)phosphite residue; primer;
XX benzyl(thio)phosphoramidite; probe production; linker; adapter;
XX gene fragment; ss.
XX Synthetic.
XX Key Location/Qualifiers
FT modified_base 1..21
FT /tag= a
FT /note= "Phosphorothioate backbone"
PN WO9940101-A1.
PD 12-AUG-1999.
XX 09-FEB-1999; 99WO-US002474.

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XX 10-FEB-1998; 98US-00021277.
XX (ISIS-) ISIS PHARM INC.
XX Capaldi DC, Ravikumar VT;
XX WPI; 1999-508484/42.
XX
XX Oligonucleotide synthesis using substituted benzyl phosphoramidite for
XX reaction with synthon having free 5'-hydroxy.
XX
XX Example 12; Page 47; 72pp; English.
XX
XX This sequence represents a phosphorothioate oligonucleotide synthesised
XX using the method of the invention. The method is for the preparation of
XX oligonucleotides containing a substituted benzyl(thio)phosphate residue
XX comprising reacting an (oligo)nucleotide with a 3' substituted
XX benzyl(thio)phosphoramidite with an (oligo)nucleotide having a free 5'-
XX hydroxy, with one of the reactants, optionally immobilised on a solid
XX phase. The method is used to prepare oligonucleotides, or analogues, for
XX use as probes, primers, linkers, adapters or gene fragments, for
XX diagnostic or therapeutic use, or as research reagents. The specified
XX substituted benzyl group can be eliminated without release of toxic
XX acrylonitrile (contrast conventional 2-cyanoethoxy protecting groups)
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAGATCAAAACG 149
Db ||| ||||| |||||
21 CGCAAGAAGAGAGCAAAACG 2
RESULT 411
AAIX18799/C
ID AAX18799 standard; DNA; 21 BP.
XX
XX AAX18799;
XX
XX 10-MAY-1999 (first entry)
XX
XX Target cytomegalovirus antisense oligonucleotide ISIS 2922.
XX
XX Cellular adhesion protein; proliferation; antisense oligonucleotide;
XX alimentary canal; transport; gastrointestinal mucosa; cancer;
XX Alzheimer's disease; beta-thalassemia; malaria; viral infection; HIV;
XX inflammation; ss.
XX
XX Synthetic.
XX
XX WO9901579-A1.
XX
XX 14-JAN-1999.
XX
XX 01-JUL-1998; 98WO-US013574.
XX
XX 01-JUL-1997; 97US-00886829.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Teng C, Hardee G;
XX
XX WPI; 1999-106077/09.
XX
XX Composition comprising nucleic acid and penetration enhancer - used
XX particularly for delivering therapeutic antisense oligonucleotides across
XX the gastrointestinal mucosa, provides high bioavailability.
XX
XX Example 2; Page 112; 115pp; English.
```

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XX A pharmaceutical composition has been developed which comprises a nucleic
XX acid and at least one penetration enhancer. The compositions are used:
XX (i) to treat or prevent any disease or disorder that can be treated with
XX the nucleic acid, e.g. cancer, Alzheimer's disease, beta-thalassemia,
XX malaria, viral infections (including human immune deficiency virus
XX (HIV)), inflammation, in human or animal medicine; (ii) to investigate
XX the role of a gene or gene product in non-human animals; and (iii) to
XX modulate gene expression in cells, tissues or organs. The compositions
XX provide bioavailability of at least 15, preferably 17-35%. The
XX penetration enhancer improves: (i) transport of the nucleic acid across
XX the mucosa of the alimentary canal and into cells; and (ii) increases
XX stability of the nucleic acid. Oral administration avoids the
XX complications and expense of intravenous or other methods of
XX administration. AAX1869 to AAX18799 and AAX18801 represent antisense
XX oligonucleotides which can be used as the nucleic acid in the method of
XX the invention
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAGATCAAAACG 149
Db ||| ||||| |||||
21 CGCAAGAAGAGAGCAAAACG 2
RESULT 412
AAV72643/C
ID AAV72643 standard; DNA; 21 BP.
XX
XX AAV72643;
XX
XX 11-FEB-1999 (first entry)
XX
XX 2'-MOE gapped version of fomivirsen.
XX
XX Mouse; protein kinase C-alpha; PKC-alpha; antisense oligonucleotide;
XX phosphorothioate; enhanced bioavailability; oral delivery; diagnosis;
XX heteroatomic backbone modification; 2'-modified sugar; tumour;
XX autoimmune disease; inflammation; graft vs. host disease; ss.
XX
XX Synthetic.
XX
XX Human herpesvirus 5.
XX
XX Key Location/Qualifiers
XX modified_base 1..21
XX /*tag= a
XX /note= "phosphorothioate linkages"
XX
XX WO9849348-A1.
XX
XX 05-NOV-1998.
XX
XX 30-APR-1998; 98WO-US008798.
XX
XX 30-APR-1997; 97US-00847151.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dean NM, Bennett CF, Monia BP, Draper K, Anderson KP, Baker BF;
XX Ecker DJ;
XX
XX WPI; 1999-009446/01.
XX
XX Modified antisense oligonucleotide with increased bioavailability after
XX oral delivery - has heteroatomic backbone modification or 2'-modified
XX sugar, useful for diagnosis and therapy, e.g. of tumours.
XX
XX Example 1; Page 37; 54pp; English.
```

CC and increased binding affinity

CC and increased binding affinity

CC elicits RNase H strand cleavage of specific RNAs. Oligonucleotides of the
CC invention are useful for the diagnosis, detection and treatment of
CC conditions susceptible to oligonucleotide therapeutics (e.g. AIDS and
CC atherosclerosis). (Updated on 20-MAR-2003 to correct PR field.)

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAAGAAGAAGACAAACG 2

RESULT 415
AAAX23678/C
ID AAX23678 standard; DNA; 21 BP.
XX
AC AAX23678;
XX
DT 18-JUN-1999 (first entry)
XX
DE Deletion sequence oligonucleotide 131.

KW Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;
KW probe; cellular adhesion modulator; cellular proliferation modulator;
KW human retrovirus; human immunodeficiency virus; non-human retrovirus;
KW HIV; primer; ss.

OS Synthetic.
XX
PN WO9911820-A1.
XX
PD 11-MAR-1999.
XX
PF 01-SEP-1998; 98WO-US018084.
XX
PR 02-SEP-1997; 97US-00923771.
XX
PA (ISIS-) ISIS PHARM INC.

PI Chen D, Srivatsa GS;
XX
DR WPI; 1999-205198/17.
XX
PT New compositions comprising sensor arrays made up of unique probe
PT oligonucleotides - useful for characterizing a sample of target deletion
PT oligonucleotides.

PS Example 9; Page 145; 163pp; English.
XX
CC This invention describes a novel composition comprising a number of
CC sensor arrays, where each array comprises a unique probe oligonucleotide,
CC which is the reverse complement of part of a unique target
CC oligonucleotide present in a mixture of target deletion sequence
CC oligonucleotides. The compositions form a method for characterizing a
CC sample of target deletion oligonucleotides which are labelled and
CC hybridize with the probe oligonucleotides of the sensor arrays. Such
CC oligonucleotides and their targets are represented in AAX23548-X23709.
CC Oligonucleotides characterized by the method form pharmaceutical
CC compositions that are useful for modulating cellular adhesion or
CC proliferation, and being active against a eukaryotic pathogen, a human
CC retrovirus, a human immunodeficiency virus (HIV), or a non-human
CC retrovirus, including influenza virus, Epstein-Barr virus, Respiratory
CC Syncytial Virus or cytomegalovirus (CMV). The compositions enable
CC characterization of deletion sequence oligonucleotides having related,
CC but different nucleobase sequences, and quantification of different
CC species of deletion sequence ("target") oligonucleotides in a mixture.
CC Also, if the specificity of the oligonucleotide's nucleobase sequence for
CC its reverse complement is not modified, the method may be performed using
CC oligodeoxynucleotides

XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAAGAAGAAGACAAACG 2

RESULT 416
AAAX23548/C
ID AAX23548 standard; DNA; 21 BP.
XX
AC AAX23548;
XX
DT 18-JUN-1999 (first entry)
XX
DE Deletion sequence oligonucleotide 1.

KW Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;
KW probe; cellular adhesion modulator; cellular proliferation modulator;
KW human retrovirus; human immunodeficiency virus; non-human retrovirus;
KW HIV; primer; ss.

OS Synthetic.
XX
PN WO9911820-A1.
XX
PD 11-MAR-1999.
XX
PF 01-SEP-1998; 98WO-US018084.
XX
PR 02-SEP-1997; 97US-00923771.
XX
PA (ISIS-) ISIS PHARM INC.

PI Chen D, Srivatsa GS;
XX
DR WPI; 1999-205198/17.
XX
PT New compositions comprising sensor arrays made up of unique probe
PT oligonucleotides - useful for characterizing a sample of target deletion
PT oligonucleotides.

PS Example 1; Page 89; 163pp; English.
XX
CC This invention describes a novel composition comprising a number of
CC sensor arrays, where each array comprises a unique probe oligonucleotide,
CC which is the reverse complement of part of a unique target
CC oligonucleotide present in a mixture of target deletion sequence
CC oligonucleotides. The compositions form a method for characterizing a
CC sample of target deletion oligonucleotides which are labelled and
CC hybridize with the probe oligonucleotides of the sensor arrays. Such
CC oligonucleotides and their targets are represented in AAX23548-X23709.
CC Oligonucleotides characterized by the method form pharmaceutical
CC compositions that are useful for modulating cellular adhesion or
CC proliferation, and being active against a eukaryotic pathogen, a human
CC retrovirus, a human immunodeficiency virus (HIV), or a non-human
CC retrovirus, including influenza virus, Epstein-Barr virus, Respiratory
CC Syncytial Virus or cytomegalovirus (CMV). The compositions enable
CC characterization of deletion sequence oligonucleotides having related,
CC but different nucleobase sequences, and quantification of different
CC species of deletion sequence ("target") oligonucleotides in a mixture.
CC Also, if the specificity of the oligonucleotide's nucleobase sequence for
CC its reverse complement is not modified, the method may be performed using
CC oligodeoxynucleotides

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 6e+02; Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
||| ||||| ||||| |||||
Db 21 CGCAAGAAGAGCAACG 2

RESULT 417
AAV99279
ID AAV99279 standard; DNA; 21 BP.
XX AC AAV99279;
DT 09-MAR-1999 (first entry)
XX HIV 5' UTR homology region and cellular regulatory factor (c-abl).
XX defibrotide; polyanion salt; HIV; protozoan infection; schistosoma;
KW Schistosoma Leishmania; Trypanosoma; fungus infection;
KW Pneumocystis carinii; malaria; viral infection; genetic disease;
KW Duchenne's muscular dystrophy; Down's syndrome; degenerative disease;
KW neoplasia; cancer; skin condition; drug resistance; ss.
XX
OS Synthetic.
OS Human immunodeficiency virus.
XX
XX WO9848843-A1.
XX
XX 05-NOV-1998.
XX
XX 28-APR-1998; 98WO-US008357.
XX
XX 28-APR-1997; 97US-00848013.
XX
XX (BURC/) BURCOGLU A.
XX
XX Burcoglu A;
XX
XX WPI; 1999-034643/03.
XX
XX Use of defibrotide nucleic acid components - for treating e.g. infectious diseases, genetic diseases, degenerative diseases, DNA damage, neoplasia and skin disease, particularly HIV infection.
XX
XX Claim 33; Page 84; 9pp; English.
XX
XX Oligonucleotides AAV99271-80 represent modified defibrotide sequences containing a Human immunodeficiency virus (HIV) homology region and a cellular regulatory factor. Defibrotide is a polyanion salt of a deoxyribonucleic acid obtained from mammalian tissue. The products can be used for treating diseases such as infectious disease such as HIV infection, protozoan infection, schistosoma infection e.g. Schistosoma japonicum, Schistosoma Leishmania infection, Trypanosoma infection e.g. Trypanosoma Cruzi, and fungus infection e.g. Candida tropicalis and Candida Albicans, Aspergillus infection, Pneumocystis carinii infection, malaria, Plasmodium vivax, gram negative bacterial infection, Cytomegalovirus infection, Hepatitis virus infection, human papilloma virus infection; genetic diseases e.g. Duchenne's muscular dystrophy and Down's syndrome; degenerative diseases e.g. encephalopathy, dementia, Alzheimer's disease, Parkinson's disease, neuropathy, cardiomyopathy, aging, Kearn's Sayre syndrome, retinitis pigmentosa, ataxia, seizures, proximal muscle weakness, Leber's hereditary optic neuropathy, optic neuritis, and radiation damage; neoplasia, e.g. lympho-proliferative diseases, lymphomas, Kaposi's sarcoma, pancreatic cancer, neuroblastoma, leukemia, bladder carcinoma, breast cancer, skin cancer, lung cancer, and colon cancer; and skin diseases, e.g. molluscum contagiosum, bacillary angiomatosis, seborrheic dermatitis, psoriasis, Reiter's syndrome, insect bite reaction, Staphylococcal folliculitis, Eosinophilic folliculitis. In addition a drug resistance can be treated via administering the nucleic acid components of defibrotide and the variants in combination with the drug, e.g. a protease inhibitor

SQ Sequence 21 BP; 6 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02; Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 950 ACTGCCACCGGCAGAGGTG 969
||| ||||| ||||| |||||
Db 1 AGTGCAACCGGCAGAGGTG 20

RESULT 418
AAC62738/c
ID AAC62738 standard; DNA; 21 BP.
XX AC AAC62738;
DT 05-FEB-2001 (first entry)
XX Phosphorothioate oligonucleotide ISIS-2922.
XX Phosphorothioate; lipid; liposome; drug deliver; ss.
XX Unidentified.
XX WO200059474-A1.
XX
XX 12-OCT-2000.
XX
XX 06-APR-2000; 2000WO-US009473.
XX
XX 06-APR-1999; 99US-00287175.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Leamon CP;
XX
XX WPI; 2000-679320/66.
XX
XX New pro-cationic lipid compounds useful as components of liposomes used as vehicles for delivering pharmaceutical agents into cells.
XX
XX Disclosure; Page 31; 65pp; English.
XX
XX The present oligonucleotide is given in a specification disclosing a new lipid compound and its salts, solvates and hydrates. The compound comprises a hydrophobic tail part covalently linked to a hydrophilic head part. A region proximal to the hydrophobic tail part has a net positive charge at physiological pH and a region distal to the hydrophobic tail part has a net negative charge at physiological pH. A disulphide bond connects the regions. The lipid compound is useful for the construction of liposomes used as vehicles for delivering pharmaceutical agents into cells. The lipids and liposomes are fusogenic with membranes and deliver pharmaceutical agents to tissues or cells without inherent aggregation, which reduces toxicity

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02; Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
||| ||||| ||||| |||||
Db 21 CGCAAGAAGAGCAACG 2

RESULT 419
AAC62741/c
ID AAC62741 standard; DNA; 21 BP.
XX AC AAC62741;
XX

DT 05-FEB-2001 (first entry)
XX Phosphorothioate oligonucleotide ISIS-13312.
DE
XX Phosphorothioate; lipid; liposome; drug deliver; ss.
KW
XX Unidentified.
XX OS
XX WO200059474-A1.
XX PN
XX 12-OCT-2000.
PD
XX 06-APR-2000; 2000WO-US009473.
XX PF
XX 06-APR-1999; 99US-00287175.
XX PR
XX (ISIS-) ISIS PHARM INC.
XX PA
XX Leamon CP;
XX PI
XX WPI; 2000-679320/66.
XX DR
XX New pro-cationic lipid compounds useful as components of liposomes used
PT as vehicles for delivering pharmaceutical agents into cells.
XX
XX Disclosure; Page 31; 65pp; English.
PS
XX The present oligonucleotide is given in a specification disclosing a new
CC lipid compound and its salts, solvates and hydrates. The compound
CC comprises a hydrophobic tail part covalently linked to a hydrophilic head
CC part. A region proximal to the hydrophobic tail part has a net positive
CC charge at physiological pH and a region distal to the hydrophobic tail
CC part has a net negative charge at physiological pH. A disulphide bond
CC connects the regions. The lipid compound is useful for the construction
CC of liposomes used as vehicles for delivering pharmaceutical agents into
CC cells. The lipids and liposomes are fusogenic with membranes and deliver
CC pharmaceutical agents to tissues or cells without inherent aggregation,
CC which reduces toxicity
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 130 CGGATGAGAGATCAACG 149
Db 21 CGCAAGAAGAGCAACG 2

RESULT 420
AAC61632
ID AAC61632 standard; DNA; 21 BP.
XX
XX AAC61632;
AC
XX
XX 19-FEB-2001 (first entry)
DT
XX Mismatch reporter probe used to detect human lymphotoxin gene alleles.
DE
XX Human; lymphotoxin; bioelectronic microchip;
KW single nucleotide polymorphism; probe; ss.
XX
XX Homo sapiens.
OS
XX WO200058522-A1.
XX PN
XX 05-OCT-2000.
PD
XX 28-MAR-2000; 2000WO-US008617.
XX PF
XX 30-MAR-1999; 99US-0126865P.
XX PR
XX

PA (NANO-) NANOGEN INC.
XX
XX Giles PN, Dillon PJ, Wu DJ, Foster CB, Chanock SJ;
XX
XX WPI; 2000-638354/61.
DR
XX Detecting single nucleotide polymorphism by utilizing a bioelectronic
PT microchip having several test sites.
XX
XX Example 3; Page 17; 46pp; English.
PS
XX Reporter probes AAC61629-32 were used to detect human lymphotoxin gene
CC alleles. The method of the invention was used for detecting single
CC nucleotide polymorphisms (SNPs) in the lymphotoxin gene. The method
CC utilises electronic circuitry on silicon microchips. The method provides
CC accurate discrimination of amplified DNA samples following electronic
CC transport, concentration, and attachment of DNA to selected electrodes
CC (test sites). The test sites make up organised arrays of samples that are
CC distinguished by using internal controls of dual labelled reporters
CC comprising wild type and mismatched sequences to validate the SNP
CC genotype. Multiples of SNPs in target nucleic acids from a patient sample
CC source or a SNP in target nucleic acids of multiple patient sample
CC sources can also be detected using the electronically addressable
CC microchip
XX
XX Sequence 21 BP; 1 A; 8 C; 3 G; 9 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 1688 TCTTCCTGCTTACTCTCTG 1707
Db 2 TCTGCCATGCTTCTCTCTG 21

RESULT 421
AAZ48640/C
ID AAZ48640 standard; DNA; 21 BP.
XX
XX AAZ48640;
AC
XX 07-MAR-2000 (first entry)
DT
XX HCMV antisense inhibitor, ISIS-2922.
DE
XX Antisense inhibitor; oligonucleotide delivery agent; erythema multiforme;
KW expression modulator; cellular adhesion protein; malignant melanoma;
KW cellular proliferation modification; toxic epidermal necrolysis;
KW psoriasis; lichen planus; carcinoma; Paget's disease; Kaposi's sarcoma;
KW pulmonary fibrosis; Lyme disease; infection; therapy; HCMV; ss.
XX
XX Synthetic.
OS
XX WO9960167-A1.
XX PN
XX 25-NOV-1999.
PD
XX 20-MAY-1999; 99WO-US011142.
XX PF
XX 21-MAY-1998; 98US-00082336.
XX PR
XX (ISIS-) ISIS PHARM INC.
XX PA
XX Mehta R, Hardee GE, Cook PD, Ecker DJ, Tsai YJ, Templin MV;
XX WPI; 2000-062467/05.
XX
XX New oligonucleotide compositions for topical delivery, used for the
PT delivery of bioactive agents for, e.g. modulating expression of a
PT cellular adhesion protein.
XX
XX Disclosure; Page 47; 94pp; English.
PS

XX This sequence represents an antisense inhibitor of HCMV. The invention
 CC relates to a pharmaceutical composition comprising an oligonucleotide (ON)
 CC admixed with a topical delivery agent. The compositions can be used for
 CC the delivery of a ribozyme, an external guide sequence, an antisense ON,
 CC an antisense peptide nucleic acid, an aptamer or a molecular decoy. The
 CC ONs can be used to modulate expression of a cellular adhesion protein or
 CC modulate a rate of cellular proliferation. The compositions can also be
 CC used to treat psoriasis. They can also be used to treat e.g. lichen
 CC planus, toxic epidermal necrolysis, erythema multiforme, basal cell
 CC carcinoma, squamous cell carcinoma, malignant melanoma, Paget's disease,
 CC Kaposi's sarcoma, pulmonary fibrosis, Lyme disease and viral, fungal and
 CC bacterial infections of the skin. They can be used to treat humans and
 CC primates, avians including chickens and turkeys, domestic household,
 CC sport or farm animals including rats, mice, rabbits and guinea pigs,
 CC fish, reptiles and zoo animals. The compositions and methods may also be
 CC used to examine the function of various proteins and genes in vitro in
 CC cultured or preserved dermal tissues and in animals
 XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
 SQ Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 130 CGGATGAGAGATCAACG 149
 DB 21 CGCAGAGAGAGCAACG 2
 RESULT 422
 AAA39246
 ID AAA39246 standard; DNA; 21 BP.
 XX
 AC AAA39246;
 XX
 DT 07-SEP-2000 (first entry)
 XX
 DE Mouse type II hair keratin clone pmKII-6 3'-noncoding region PCR primer.
 XX
 KW Hair; keratin; hair cleansing composition; pre-shampoo; shampoo;
 KW conditioning rinse; hair styling; gel; spray; mousse; dyeing; bleaching;
 KW tinting; nail care product; nail polish remover; nail polish; PCR primer;
 KW ss.
 XX
 OS Mus sp.
 XX
 PN WO200023039-A2.
 XX
 PD 27-APR-2000.
 XX
 PF 18-OCT-1999; 99WO-US024426.
 XX
 PR 16-OCT-1998; 98US-00174186.
 XX
 PA (ENSL/) ENSLEY B D.
 XX
 PI Ensley BD;
 XX
 XX WPI; 2000-339487/29.
 DR Formulating hair treatment composition useful for producing hair
 PT preparations for improved hair characteristics by using human keratin
 PT allelic variants, which has not been cross-linked.
 XX
 PS Example 3; Page 43; 55pp; English.
 XX
 CC The present invention describes a method for formulating a hair treatment
 CC composition by using non-naturally occurring human keratin protein which
 CC has not been previously cross-linked. The method is useful for producing
 CC hair treatment composition for improved hair characteristics, and hair
 CC treatment preparations tailored to an individual's preference. The
 CC keratin is added to hair cleansing compositions, e.g. pre-shampoo,
 CC shampoo, or conditioning rinse, to hair styling or shaping compositions,
 CC e.g. gel, spray or mousse, or in hair dyeing, bleaching or tinting
 CC compositions. It may also be used in developing nail care products, such
 CC as nail polish and nail polish remover. The method provides hair
 CC treatment preparations tailored to the individual's preferences as well
 CC as to the manufacturers' preferences of hair treatment compositions. The
 CC present sequence represents a PCR primer for the murine type II hair
 CC keratin clone pmKII-6 3'-noncoding region, which is used in an example
 CC from the present invention
 XX
 SQ Sequence 21 BP; 3 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1468 CTGGGGGAGCGGATCCACAA 1487
 DB 1 CTGGGGGAGCGGATCCCTCCA 20
 RESULT 423
 AAZ40364/C
 ID AAZ40364 standard; DNA; 21 BP.
 XX
 AC AAZ40364;
 XX
 DT 02-MAR-2000 (first entry)
 XX
 DE Antisense inhibitor of HCMV, ISIS-2922.
 XX
 KW Antisense oligonucleotide; inhibitor; pulmonary delivery composition;
 KW gene expression modulation; asthma; lung cancer; pulmonary fibrosis;
 KW rhinovirus; tuberculosis; bronchitis; pneumonia; pulmonary disorder;
 KW viral disease; obstructive lung disorder; pulmonary embolism; emphysema;
 KW anaphylaxis; chronic obstructive pulmonary disease; COPD; bronchiectasis;
 KW chronic bronchitis; cystic fibrosis; therapy; HCMV; ss.
 XX
 OS Synthetic.
 XX
 PN WO9960010-A1.
 XX
 PD 25-NOV-1999.
 XX
 PF 20-MAY-1999; 99WO-US011214.
 XX
 PR 21-MAY-1998; 98US-00083585.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Bennett CF, Ecker DJ, Cook PD;
 XX
 XX WPI; 2000-062437/05.
 DR Composition for pulmonary delivery useful for treating and diagnosing
 PT pulmonary diseases such as asthma, tuberculosis, etc.
 XX
 PS Claim 54; Page 33; 85pp; English.
 XX
 CC This sequence represents an antisense inhibitor of HCMV. The invention
 CC relates to a pharmaceutical composition (C) for pulmonary delivery of an
 CC oligonucleotide, comprising at least one oligonucleotide or its
 CC bioequivalent. (C) can be used to investigate the role of a gene or gene
 CC product in an animal other than human. (C) is also useful in a method of
 CC modulating the expression of a gene in an animal. (C) is useful in
 CC treating or diagnosing asthma, lung cancer, pulmonary fibrosis,
 CC rhinovirus, tuberculosis, bronchitis, pneumonia. The oligonucleotides are
 CC useful in determining the nature, function and potential relationship to
 CC body of a disease status in animal of various genetic components of the
 CC body. (C) is useful for therapeutic, palliative or prophylactic treatment
 CC or to prevent the onset or recurrence of the diseases associated with
 CC pulmonary disorders. (C) is also useful in the treatment of diseases
 CC caused by viruses (such as respiratory syncytial virus, Hemophilus

CC influenza, parainfluenza, etc.), obstructive lung disorders (such as
 CC pulmonary embolism or anaphylaxis), chronic obstructive pulmonary disease
 CC (COPD), emphysema, chronic bronchitis, bronchiectasis and cystic
 CC fibrosis. (C) administered through pulmonary delivery overcomes the
 CC complication and expenses associated with other routes of administration.
 CC Modified or substituted oligonucleotides have enhanced cellular uptake,
 CC target binding and increased stability in the presence of nucleases.
 CC Pulmonary administration of phosphodiester oligonucleotides lowers the
 CC level of nuclease activity in lung tissue to afford phosphodiester
 CC oligonucleotides longer lifetimes in lung tissue
 XX
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;
 Matches 17; Conservative 0; Indels 3; Indels 0; Gaps 0;
 Qy 130 CGGATGAAGAAGATCAAAACG 149
 Db 21 CGCAAGAAGAAGAGCAAAACG 2
 RESULT 424
 AAZ47919/C
 ID AAZ47919 standard; DNA; 21 BP.
 XX
 AC AAZ47919;
 XX
 DT 10-MAR-2000 (first entry)
 DE
 DE HCMV phosphorothioate antisense oligonucleotide ISIS 13312.
 KW Phosphorothioate; antisense oligonucleotide; HCMV; pulmonary delivery;
 KW asthma; lung cancer; pulmonary fibrosis; cytostatic; antiasthmatic;
 KW antiviral; rhinovirus; tuberculosis; bronchitis; pneumonia; anaphylaxis;
 KW respiratory syncytial virus; parainfluenza; obstructive lung disorder;
 KW pulmonary embolism; chronic obstructive pulmonary disease; COPD;
 KW emphysema; chronic bronchitis; bronchiectasis; cystic fibrosis; ss.
 XX
 OS Synthetic.
 OS Human herpesvirus 5.
 XX
 XX Key Location/Qualifiers
 FT modified_base 1..21
 FT /*tag= a
 FT /note= "phosphorothioate linkages"
 XX
 XX WO9960166-A1.
 XX
 XX 25-NOV-1999.
 XX
 XX 20-MAY-1999; 99WO-US011141.
 XX
 XX 21-MAY-1998; 98US-00083586.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Bennett CF, Ecker DJ, Cook PD;
 XX
 XX WPI; 2000-062466/05.
 XX
 XX New pharmaceutical composition useful for pulmonary delivery of
 XX oligonucleotide for treating asthma, lung cancer and pulmonary fibrosis.
 XX
 XX Claim 62; Page 34; 90pp; English.
 XX
 XX The present invention describes a pharmaceutical composition for
 XX pulmonary delivery of an oligonucleotide comprising at least one
 XX oligonucleotide where the sugar moiety of at least one nucleoside unit of
 XX the oligonucleotide is not a 2'-deoxyribofuranosyl sugar moiety or at
 XX least one internucleotide linkage within the oligonucleotide is not a
 XX phosphodiester or a phosphothioate linkage. The composition is useful for
 XX treating an animal having or suspected of having a disease or a disorder

CC that is treatable with one or more nucleic acids e.g. asthma, a cancer of
 CC the lung, pulmonary fibrosis, rhinovirus, tuberculosis, bronchitis or
 CC pneumonia and other lung disorders e.g. respiratory syncytial virus, H.
 CC influenza, parainfluenza, chronic obstructive lung disorders e.g. pulmonary
 CC embolism or anaphylaxis, chronic obstructive pulmonary disease (COPD),
 CC emphysema, chronic bronchitis, bronchiectasis and cystic fibrosis. The
 CC oligonucleotides are also useful for determining the nature, function and
 CC potential relationship to body or disease states in animals or various
 CC genetic components of the body. Pulmonary administration of an antisense
 CC oligonucleotide bypasses the complications and expense associated with
 CC intravenous and other routes of administration providing enhanced
 CC delivery of the oligonucleotides. The modified oligonucleotides have
 CC enhanced cellular uptake, enhanced binding to target and increased
 CC stability in the presence of nucleases. The present sequence represents
 CC an antisense oligonucleotide used in the exemplification of the present
 CC invention
 XX
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;
 Matches 17; Conservative 0; Indels 3; Indels 0; Gaps 0;
 Qy 130 CGGATGAAGAAGATCAAAACG 149
 Db 21 CGCAAGAAGAAGAGCAAAACG 2
 RESULT 425
 AAZ48120/C
 ID AAZ48120 standard; DNA; 21 BP.
 XX
 AC AAZ48120;
 XX
 DT 14-MAR-2000 (first entry)
 DE
 DE HCMV targeting antisense oligonucleotide ISIS-2922 SEQ ID NO:2.
 KW Antisense oligonucleotide; phosphorothioate; inhibition; liposome;
 KW long-circulating liposome; anticancer; anti-inflammatory; tumour;
 KW inflammation; autoimmune disease; cytostatic; immunosuppressive;
 KW gene therapy; ss.
 XX
 OS Synthetic.
 OS Human herpesvirus 5.
 XX
 XX Key Location/Qualifiers
 FT modified_base 1..21
 FT /*tag= a
 FT /note= "phosphorothioate linkages"
 XX
 XX WO9959547-A1.
 XX
 XX 25-NOV-1999.
 XX
 XX 20-MAY-1999; 99WO-US011267.
 XX
 XX 21-MAY-1998; 98US-00082365.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Mehta R, Hardee GE, Leamon C;
 XX
 XX WPI; 2000-072399/06.
 XX
 XX New liposome compositions having long plasma half-lives, used for
 XX delivering compounds for treating e.g. tumors, inflammation or autoimmune
 XX diseases.
 XX
 XX Disclosure; Page 33; 91pp; English.
 XX
 XX The present invention describes a liposome (I) which has a plasma half-
 XX life of at least 5 hours and comprises at most 10 mol % of a

CC phosphatidylglycerol (PG) compound that has a fatty acid portion of 10 to
 CC 20 carbon atoms. The liposomes can be used to encapsulate a bioactive
 CC agent, e.g. an anticancer agent, an anti-inflammatory agent, an
 CC oligonucleotide (such as a hemimer, molecular decoy or an aptamer) or an
 CC antisense compound (such as a ribozyme, an external guide sequence, a
 CC compound comprising at most synthetic moiety which has nuclease activity,
 CC an antisense peptide nucleic acid, an antisense nucleotide and/or
 CC comprising a sequence that hybridises to a nucleotide sequence present in
 CC a viral gene, ras gene or a gene encoding a cellular adhesion molecule).
 CC Such liposomes can be used for: (1) preventing cancer or reducing the
 CC rate of growth of a tumour or cancer in a mammal; (2) preventing or
 CC reducing the severity of inflammation in a mammal (especially a human);
 CC (3) modulating expression of a gene by contacting cells, tissues, organs
 CC or organisms expressing the gene with the liposome; or (4) preventing,
 CC reducing the rate of progression of or reducing the severity of symptoms
 CC resulting from an autoimmune disease in a mammal. The liposomes have long
 CC circulating half-life in mammalian plasma. AAZ48119 to AAZ48130 represent
 CC antisense oligonucleotide sequences used in the exemplification of the
 CC present invention
 XX
 XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149

Db 21 CGCAGAGAGAGCAACG 2

RESULT 426

AAZ49391/c

ID AAZ49391 standard; DNA; 21 BP.

XX AC AAZ49391;

XX 14-MAR-2000 (first entry)

DE HCMV targeted phosphorothioate antisense oligonucleotide ISIS 13312.
 XX
 XX

KW Viral infection; expression; modulation; antisense; non-parenteral;
 KW delivery; uptake; administration; emulsion; ulcerative colitis;
 KW Crohn's disease; inflammatory bowel disease; cellular proliferation;
 KW HCMV; human cytomegalovirus; ss.

XX Synthetic.

OS Human herpesvirus 5.

XX

Key Location/Qualifiers

FT modified_base 1..21

FT /tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate linkages"

FT modified_base 1..7

FT /tag= b

FT /mod_base= OTHER

FT /note= "2'-methoxyethoxy oligonucleotides"

FT modified_base 2

FT /tag= c

FT /mod_base= m5c

FT modified_base 8

FT /tag= d

FT /mod_base= m5c

FT modified_base 10

FT /tag= e

FT /mod_base= m5c

FT modified_base 13

FT /tag= f

FT /mod_base= m5c

FT modified_base 15..20

FT /tag= g

FT /mod_base= OTHER

FT modified_base /note= "2'-methoxyethoxy oligonucleotides"

FT 16

FT /tag= h

FT /mod_base= m5c

FT modified_base 20

FT /tag= i

FT /mod_base= m5c

XX WO960012-A1.

XX

XX PD 25-NOV-1999.

XX

XX PF 20-MAY-1999; 99WO-US011394.

XX

XX PR 21-MAY-1998; 98US-00082624.

XX

XX PA (ISIS-) ISIS PHARM INC.

XX

XX PI Teng C, Cook PD, Tillman L, Hardee GE, Ecker DJ, Manoharan M;

XX WPI; 2000-072428/06.

XX

XX PT New oligonucleotide compositions used for the non-parenteral delivery of
 PT e.g. antisense oligos, ribozymes, peptide nucleic acids, molecular
 PT decoys, external guide sequences or aptamers.

XX PS Claim 80; Page 37; 133pp; English.

XX

CC Sequences AAZ49374-249383, AAZ49389 and AAZ49391 represent antisense
 CC oligonucleotides designed to have therapeutic activity against certain
 CC non-retroviral viruses. The invention relates to new compositions for the
 CC non-parenteral delivery of oligonucleotides comprising at least one
 CC oligonucleotide in an emulsion. Oligonucleotides delivered via the
 CC compositions of the invention can be used to modulate expression of a
 CC cellular adhesion protein, modulate a rate of cellular proliferation, or
 CC have biological activity against eukaryotic pathogens or retroviruses.
 CC They can be used for treating conditions including e.g., ulcerative
 CC colitis, Crohn's disease, inflammatory bowel disease or undue cellular
 CC proliferation. The compositions can enhance the local and systemic uptake
 CC and delivery of nucleic acids via non-parenteral routes of administration
 CC (e.g., via the alimentary canal, skin, eyes, pulmonary tract, urethra or
 CC vagina)

XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 6e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149

Db 21 CGCAGAGAGAGCAACG 2

RESULT 427

AAZ49383/c

ID AAZ49383 standard; DNA; 21 BP.

XX AC AAZ49383;

XX

XX DT 14-MAR-2000 (first entry)

XX

DE HCMV targeted phosphorothioate antisense oligonucleotide ISIS 2922.

XX

KW Viral infection; expression; modulation; antisense; non-parenteral;

KW delivery; uptake; administration; emulsion; ulcerative colitis;

KW Crohn's disease; inflammatory bowel disease; cellular proliferation;

KW HCMV; human cytomegalovirus; ss.

XX Synthetic.

OS Human herpesvirus 5.

XX

XX Key Location/Qualifiers

```

FT modified_base 1. .21
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "Phosphorothioate linkages"
XX
XX WO9960012-A1.
XX
XX 25-NOV-1999.
XX
XX 20-MAY-1999; 99WO-US011394.
XX
XX 21-MAY-1998; 98US-00082624.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Teng C, Cook PD, Tillman L, Hardee GE, Ecker DJ, Manoharan M;
XX WPI; 2000-072428/06.
XX
XX New oligonucleotide compositions used for the non-parenteral delivery of
XX e.g. antisense oligos, ribozymes, peptide nucleic acids, molecular
XX decoys, external guide sequences or aptamers.
XX
XX Claim 80; Page 37; 133pp; English.
XX
XX Sequences AA249374-249383, AA249389 and AA249391 represent antisense
XX oligonucleotides designed to have therapeutic activity against certain
XX non-retroviral viruses. The invention relates to new compositions for the
XX non-parenteral delivery of oligonucleotides comprising at least one
XX oligonucleotide in an emulsion. Oligonucleotides delivered via the
XX compositions of the invention can be used to modulate expression of a
XX cellular adhesion protein, modulate a rate of cellular proliferation, or
XX have biological activity against eukaryotic pathogens or retroviruses.
XX They can be used for treating conditions including e.g., ulcerative
XX colitis, Crohn's disease, inflammatory bowel disease or undue cellular
XX proliferation. The compositions can enhance the local and systemic uptake
XX and delivery of nucleic acids via non-parenteral routes of administration
XX (e.g., via the alimentary canal, skin, eyes, pulmonary tract, urethra or
XX vagina)
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAAGAAGATCAACG 149
XX |||||
XX Db 21 CGCAAGAAGAAGCAAAACG 2
XX
XX RESULT 428
XX AA248172/c
XX ID AA248172 standard; DNA; 21 BP.
XX
XX AC AA248172;
XX
XX 14-MAR-2000 (first entry)
XX
XX CMV replication chimeric phosphorothioate oligonucleotide SEQ ID NO:19.
XX
XX Polyrribonucleotide solid phase synthesis; diagnosis; hybridisation;
XX protein production modulation; 2'-deoxyfuranosyl moiety; anti-HIV;
XX antiarteriosclerotic; nuclease resistant; atherosclerosis; AIDS;
XX abnormal cell proliferation; tumour formation; ss.
XX
XX Synthetic.
XX
XX US6005087-A.
XX
XX 21-DEC-1999.
XX
XX 05-MAR-1998; 98US-00035357.

```

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XX 11-JAN-1990; 90US-00463358.
XX 13-AUG-1990; 90US-00566977.
XX 12-AUG-1991; 91WO-US0005720.
XX 05-MAR-1992; 92US-00835932.
XX 01-JUL-1992; 92US-00854634.
XX 06-JUN-1995; 95US-00468037.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Cook PD;
XX WPI; 2000-072074/06.
XX
XX Nuclease resistant oligonucleotides useful as research agents, diagnostic
XX agents, and in the treatment of atherosclerosis and AIDS.
XX
XX Example 34; Col 54; 49pp; English.
XX
XX The present invention describes nuclease resistant oligonucleotides (I)
XX comprising 2'-fluoro modified ribofuranosyl nucleotides. (I) comprise
XX covalently bound nucleotides, where the nucleotides are joined together
XX by: (a) internucleotide linkages such that the base portion of the
XX nucleotides forms a mixed base sequence; and (b) at least one of the
XX nucleotides includes a modified ribofuranosyl group bearing a 2'-fluoro
XX substituent; provided that at least two of the nucleotides are 2'-fluoro
XX modified ribofuranosyl nucleotides when the internucleotide linkages are
XX phosphodiester nucleotides. (I) bind to their target mRNA and inhibit its
XX expression. (I) are resistant to nuclease degradation and hybridise with
XX appropriate strength and fidelity to its target RNA/DNA. (I) are also
XX useful as research agents, diagnostic agents and as oligonucleotide
XX therapeutics. (I) may be used to treat atherosclerosis following
XX angioplasty to prevent reocclusion of the treated arteries. (I) may also
XX be used in conjunction with AZI to treat AIDS patients. (I) have been
XX used to modulate the expression of RAF gene, a cellular gene whose
XX activate form has been implicated in abnormal cell proliferation and
XX tumour formation. (I) are also used to modulate the expression of protein
XX kinase C. (I) exhibit hybridisation properties of higher quality than
XX phosphorous modified oligonucleotide duplexes containing
XX methylphosphonates, phosphoramidates and phosphate triesters. The present
XX sequence represent an oligonucleotide used in the exemplification of the
XX present invention
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAAGAAGATCAACG 149
XX |||||
XX Db 21 CGCAAGAAGAAGCAAAACG 2
XX
XX RESULT 429
XX AA248171/c
XX ID AA248171 standard; DNA; 21 BP.
XX
XX AC AA248171;
XX
XX 14-MAR-2000 (first entry)
XX
XX CMV replication chimeric phosphorothioate oligonucleotide SEQ ID NO:18.
XX
XX Polyrribonucleotide solid phase synthesis; diagnosis; hybridisation;
XX protein production modulation; 2'-deoxyfuranosyl moiety; anti-HIV;
XX antiarteriosclerotic; nuclease resistant; atherosclerosis; AIDS;
XX abnormal cell proliferation; tumour formation; ss.
XX
XX Synthetic.
XX
XX US6005087-A.
XX
XX 21-DEC-1999.
XX
XX 05-MAR-1998; 98US-00035357.

```

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PD 21-DEC-1999.
XX
PF 05-MAR-1998; 98US-00035357.
XX
PR 11-JAN-1990; 90US-00453358.
PR 13-AUG-1990; 90US-00566977.
PR 12-AUG-1991; 91WO-US005720.
PR 05-MAR-1992; 92US-00835932.
PR 01-JUL-1992; 92US-00854634.
PR 06-JUN-1995; 95US-00468037.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Kawasaki AM, Cook PD;
XX
DR WPI; 2000-072074/06.
XX
PT Nuclease resistant oligonucleotides useful as research agents, diagnostic
PT agents, and in the treatment of atherosclerosis and AIDS.
XX
PS Example 34; Col 54; 49pp; English.
XX
CC The present invention describes nuclease resistant oligonucleotides (I)
CC comprising 2'-fluoro modified ribofuranosyl nucleotides. (I) comprise
CC covalently bound nucleotides, where the nucleotides are joined together
CC by: (a) internucleotide linkages such that the base portion of the
CC nucleotides forms a mixed base sequence; and (b) at least one of the
CC nucleotides includes a modified ribofuranosyl group bearing a 2'-fluoro
CC substituent; provided that at least two of the nucleotides are 2'-fluoro
CC modified ribofuranosyl nucleotides when the internucleotide linkages are
CC phosphodiester nucleotides. (I) bind to their target mRNA and inhibit its
CC expression. (I) are resistant to nuclease degradation and hybridise with
CC appropriate strength and fidelity to its target RNA/DNA. (I) are also
CC useful as research agents, diagnostic agents and as oligonucleotide
CC therapeutics. (I) may be used to treat atherosclerosis following
CC angioplasty to prevent reocclusion of the treated arteries. (I) may also
CC be used in conjunction with AZT to treat AIDS patients. (I) have been
CC used to modulate the expression of RAF gene, a cellular gene whose
CC activate form has been implicated in abnormal cell proliferation and
CC tumour formation. (I) are also used to modulate the expression of protein
CC kinase C. (I) exhibit hybridisation properties of higher quality than
CC phosphorous modified oligonucleotide duplexes containing
CC methylphosphonates, phosphoramidates and phosphate triesters. The present
CC sequence represent an oligonucleotide used in the exemplification of the
XX present invention
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGAGATCAACG 149
DB 21 CGCAAGAGAGAGCAACG 2

RESULT 430
AA14473/c
ID AA14473 standard; DNA; 21 BP.
XX
AC AA14473;
XX
DT 21-AUG-2000 (first entry)
XX
DE Synthetic oligonucleotide #3.
XX
KW Solid phase DNA synthesis; phosphoramidate nucleoside; acetonitrile;
XX water content; synthetic oligonucleotide; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers

FT modified_base 1..21
FT /*tag= a
FT /note= "phosphorothioate linkages"
XX
PN WO200020431-A1.
XX
PD 13-APR-2000.
XX
PF 01-OCT-1999; 99WO-US022892.
XX
PR 06-OCT-1998; 98US-00167165.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Scozzari A;
XX
DR WPI; 2000-303729/26.
XX
PT Coupling of a phosphoramidite nucleoside to a solid support-bound
PT nucleoside, useful for the synthesis of oligonucleotides for use in
PT diagnostic, research or therapeutic applications.
XX
PS Example 8; Page 20; 30pp; English.
XX
CC The invention relates to the use of acetonitrile having a water content
CC of 30-1250 ppm in the linking of a phosphoramidite nucleoside to a solid
CC support-bound nucleoside, and to the use of this process in the synthesis
CC of oligonucleotides. The method is used for the coupling of a
CC phosphoramidite nucleoside to a solid support-bound nucleoside,
CC particularly in the large-scale synthesis of oligonucleotides using the
CC phosphoramidite method. The oligonucleotides can be used in diagnostic,
CC research and therapeutic applications, e.g., as probes, primers, linkers,
CC adapters and antisense oligonucleotides. The use of acetonitrile having a
CC water content of 30-1250 ppm as compared to conventional methods using a
CC lower water content acetonitrile (at most 30 ppm) provides more
CC economical synthesis without reduced efficiency of oligonucleotide
CC synthesis. Sequences AA14471-AA14474 represent oligonucleotides
XX synthesised using the process of the invention
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGAGATCAACG 149
DB 21 CGCAAGAGAGAGCAACG 2

RESULT 431
AA257151/c
ID AA257151 standard; DNA; 21 BP.
XX
AC AA257151;
XX
DT 03-APR-2000 (first entry)
XX
DE Phosphorothioate 21-mer oligonucleotide #3.
XX
KW Phosphorothioate; activator; oligonucleotide synthesis; phosphoramidite;
XX phosphorylating reagent; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..21
FT /*tag= a
FT /note= "phosphorothioate linkages"
XX
PN WO9962922-A1.
XX
PD 09-DEC-1999.

```



```
XX 02-JUN-1999; 99WO-US012251.
XX PF
XX 02-JUN-1998; 98US-0087757P.
XX PR
XX 23-OCT-1998; 98US-00177953.
XX PR
XX (ISIS-) ISIS PHARM INC.
XX PA
XX Sanghvi Y, Manoharan M, Ravikumar VT;
XX PI
XX WPI; 2000-097311/08.
XX DR
XX Preparation of nucleoside phosphoramidites and oligonucleotides.
XX PT
XX Example 20; Page 81; 153pp; English.
XX PS
XX The present invention describes nucleoside phosphoramidites and
XX CC oligonucleotides (ON's) prepared using pyridinium, imidazolium or
XX CC benzimidazolium salts as activators. The preparation of a phosphitylated
XX CC compound comprises reacting a compound having a hydroxyl group with a
XX CC phosphitylating reagent in the presence of a pyridinium salt in a
XX CC solvent. The phosphoramidites are useful as building blocks for synthesis
XX CC of oligonucleotides, which are potentially useful in therapeutic and
XX CC diagnostic applications. The activators can be produced in situ by mixing
XX CC pyridine and an acid, producing benefits in large scale synthesis.
XX CC Compared with conventional activators, e.g. 1H tetrazole, the pyridinium
XX CC salts, and materials necessary for their generation in situ, are non-
XX CC explosive and easier to store, and also cheaper and have higher
XX CC solubility in organic solvents. Final purity of the phosphitylated
XX CC material results from use of a less acidic reaction medium when
XX CC pyridinium salts are used. The present sequence represents a
XX CC phosphorothioate 21-mer oligonucleotide, the synthesis of which is
XX CC described in an example from the present invention
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAAACG 149
Db 21 CGCAAGAAGAAGAGCAAACG 2
RESULT 432
AAA94541/c
ID AAA94541 standard; DNA; 21 BP.
XX AC
XX AAA94541;
XX DT 10-JAN-2001 (first entry)
XX Example biologically active oligonucleotide #3.
XX DE
XX Oligonucleotide; non-parenteral; multi-particulate; phosphorothioate; ss.
XX OS
XX Synthetic.
XX Key Location/Qualifiers
XX modified_base 1..21
XX /*tag= a
XX /mod_base= OTHER
XX FT FT
XX /*note= "Phosphorothioate internucleotide linkage"
XX modified_base 1..7
XX /*tag= b
XX /mod_base= OTHER
XX FT FT
XX /*note= "2'-O-methoxyethyl nucleoside"
XX modified_base 2
XX /*tag= c
XX /mod_base= m5c
XX FT FT
XX modified_base 8
XX /*tag= d
XX /mod_base= m5c
XX FT FT
XX modified_base 10
XX /*tag= e
XX /mod_base= m5c
XX FT FT
XX modified_base 13
XX /*tag= f
XX /mod_base= m5c
XX FT FT
XX modified_base 15..20
XX /*tag= g
XX /mod_base= OTHER
XX FT FT
```

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XX 02-JUN-1999; 99WO-US012251.
XX PF
XX 02-JUN-1998; 98US-0087757P.
XX PR
XX 23-OCT-1998; 98US-00177953.
XX PR
XX (ISIS-) ISIS PHARM INC.
XX PA
XX Sanghvi Y, Manoharan M, Ravikumar VT;
XX PI
XX WPI; 2000-097311/08.
XX DR
XX Preparation of nucleoside phosphoramidites and oligonucleotides.
XX PT
XX Example 20; Page 81; 153pp; English.
XX PS
XX The present invention describes nucleoside phosphoramidites and
XX CC oligonucleotides (ON's) prepared using pyridinium, imidazolium or
XX CC benzimidazolium salts as activators. The preparation of a phosphitylated
XX CC compound comprises reacting a compound having a hydroxyl group with a
XX CC phosphitylating reagent in the presence of a pyridinium salt in a
XX CC solvent. The phosphoramidites are useful as building blocks for synthesis
XX CC of oligonucleotides, which are potentially useful in therapeutic and
XX CC diagnostic applications. The activators can be produced in situ by mixing
XX CC pyridine and an acid, producing benefits in large scale synthesis.
XX CC Compared with conventional activators, e.g. 1H tetrazole, the pyridinium
XX CC salts, and materials necessary for their generation in situ, are non-
XX CC explosive and easier to store, and also cheaper and have higher
XX CC solubility in organic solvents. Final purity of the phosphitylated
XX CC material results from use of a less acidic reaction medium when
XX CC pyridinium salts are used. The present sequence represents a
XX CC phosphorothioate 21-mer oligonucleotide, the synthesis of which is
XX CC described in an example from the present invention
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAAACG 149
Db 21 CGCAAGAAGAAGAGCAAACG 2
RESULT 432
AAA94541/c
ID AAA94541 standard; DNA; 21 BP.
XX AC
XX AAA94541;
XX DT 10-JAN-2001 (first entry)
XX Example biologically active oligonucleotide #3.
XX DE
XX Oligonucleotide; non-parenteral; multi-particulate; phosphorothioate; ss.
XX OS
XX Synthetic.
XX Key Location/Qualifiers
XX modified_base 1..21
XX /*tag= a
XX /mod_base= OTHER
XX FT FT
XX /*note= "Phosphorothioate internucleotide linkage"
XX modified_base 1..7
XX /*tag= b
XX /mod_base= OTHER
XX FT FT
XX /*note= "2'-O-methoxyethyl nucleoside"
XX modified_base 2
XX /*tag= c
XX /mod_base= m5c
XX FT FT
XX modified_base 8
XX /*tag= d
XX /mod_base= m5c
XX FT FT
XX modified_base 10
XX /*tag= e
XX /mod_base= m5c
XX FT FT
XX modified_base 13
XX /*tag= f
XX /mod_base= m5c
XX FT FT
XX modified_base 15..20
XX /*tag= g
XX /mod_base= OTHER
XX FT FT
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FT modified_base /note= "2'-O-methoxyethyl nucleoside"
FT 16
FT /tag= h
FT /mod_base= m5c
FT 20
FT modified_base /tag= i
FT /mod_base= m5c
XX
XX WO200050050-A1.
XX
XX 31-AUG-2000.
XX
XX 23-FEB-2000; 2000WO-US004662.
XX
XX 23-FEB-1999; 99US-00256515.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hardee GE, Tillman LG, Mehta RC, Teng C;
XX WPI; 2000-572032/53.
XX
XX Non-parenteral multi-particulate formulations comprise biologically
PT active substances bound to carrier particles for delivery across mucosal
PT membranes.
XX
XX Claim 4; Page 8; 38pp; English.
XX
XX The present invention relates to non-parenteral multi-particulate
CC formulations for transporting agents (for example therapeutic) across
CC mucosal membranes. The formulations comprise carrier particles bound with
CC a biologically active agent and a penetration enhancer. The formulations
CC associate with buccal, nasal, pulmonary, gastrointestinal and vaginal
CC mucosal membranes to transport the biologically active agents to the
CC lymph system, blood system or epithelial tissue of the subject. The
CC formulation is administered orally which is preferred by patients. The
CC present sequence is an example oligonucleotide that may be used in the
XX formulation
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAAGAGATCAAAACG 149
XX ||| ||||| ||||| |||||
XX 21 CGCAAGAAGAGAGCAAAACG 2
XX
XX RESULT 434
XX AAF60903/c
XX ID AAF60903 standard; DNA; 21 BP.
XX
XX AAF60903;
XX AC
XX 15-MAY-2001 (first entry)
XX
XX Anti-CMV oligonucleotide SEQ ID 12.
XX
XX Transport; membrane; cytostatic; virucide; vasotropic; dermatological;
XX antipsoriatic; antiasthmatic; gene therapy; tumor cell; antisense;
XX tumor therapy; drug; ss.
XX
XX Unidentified.
XX
XX DE19935302-A1.
XX
XX 08-FEB-2001.
XX
XX 28-JUL-1999; 99DE-01035302.
XX
XX 28-JUL-1999; 99DE-01035302.
XX
XX
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(AVET ) AVENTIS PHARMA DEUT GMBH.
Uhlmann E, Greiner B, Unger E, Gothe G, Schwerdel M;
WPI; 2001-203679/21.
New substituted aryl conjugates of parent molecules, especially
oligonucleotides, having improved transmembrane and intracellular
transport properties, useful as medicaments or diagnostic agents.
Disclosure: Page 6; 28pp; German.
This invention describes a novel conjugate (I) which consists of (A) a
molecule to be transported and (B) at least one aryl residue of formula -
Ar-(X-C(Y)-R_1)_n (II). Ar = group containing at least one aromatic ring;
X = O or N (sic); Y = O, S or NH-R_2 (sic); R_1 = optionally substituted
1-23C alkyl (optionally containing double and/or triple bonds); R_2 =
optionally substituted 1-18C alkyl (optionally containing double and/or
triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or
via a chemical group, provided that the chemical group is other than CH_2
-S if the bond is via a phosphodiester linkage of (A). The invention also
describes (i) the preparation of a conjugate (I') of (A') a molecule to
be transported and (B') at least one aryl residue (not restricted to
(II)), by preparing (A') containing a reactive function at the position
at which (B') is to be bonded, preparing (B') and reacting (A') and (B');
and (ii) the use of aryl groups (II) (optionally bonded via a chemical
group) for transporting (A) across biological membranes. The products of
the invention have cytostatic, virucide, vasotropic, dermatological,
antipsoriatic and antiasthmatic activity and can be used for gene
therapy. Conjugation of (A) with (B) is useful for transporting (A)
across biological membranes or into eukaryotic or prokaryotic cells
(specifically bacterial, yeast or mammalian cells, including human cells,
particularly tumor cells). Medicaments, diagnostic agents and test kits
containing (I) are also claimed. Typically (I) are antisense
oligonucleotide derivatives for tumor therapy; oligonucleotide drugs for
treating viral infections or diseases associated with integrins or cell-
cell interactions (e.g. restenosis, vitiligo, psoriasis or asthma); or
labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ
hybridization. Conjugation with (B) markedly improves the cellular uptake
of (A), e.g. in tumor cells. (B) include fluorescently labeled residues,
in which case the conjugates (I) are fluorescently labeled, allowing
microscopic monitoring of cellular uptake etc. The cellular uptake of (I)
is superior to that obtained using other conjugated groups related to
(II); e.g. oligonucleotides conjugated with fluorescein diacetate (within
the scope of (B)) have superior uptake to corresponding fluorescein
conjugates
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAAGAGATCAAAACG 149
XX ||| ||||| ||||| |||||
XX 21 CGCAAGAAGAGAGCAAAACG 2
XX
XX RESULT 435
XX AAF97221
XX ID AAF97221 standard; DNA; 21 BP.
XX
XX AAF97221;
XX AC
XX 06-JUN-2001 (first entry)
XX
XX Human gene single nucleotide polymorphism #1982.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX polymorphism; vascular disease; coronary artery disease; forensics;
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX pulmonary embolism; paternity test; ds.
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PD 05-JUN-2001.
XX
XX 11-JAN-2000; 2000US-00481486.
XX
XX 15-OCT-1997; 97US-00950779.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cole DL, Ravikumar VT, Cheruvallath ZS;
XX WPI; 2001-407218/43.
XX
XX Preparing sulfurized 2' substituted phosphorothioate oligonucleotides
XX useful in biological research, comprises phosphorylating the 5'-hydroxyl
XX of a nucleic acid having a nucleoside with a 2' modification.
XX
XX Example 5; Col 6; 7pp; English.
XX
XX The present invention relates to a method for preparing phosphorothioate
XX oligonucleotides having at least one nucleoside with a 2' modification.
XX The method comprises phosphorylating the 5'-hydroxyl of a nucleic acid
XX group having at least one nucleoside with a 2' modification in an
XX acetonitrile. The present sequence was used to illustrate the method of
XX the present invention. The method is useful for synthesizing sulphurised
XX 2' substituted phosphorothioate oligonucleotides, which may be used in
XX molecular biological research, in applications such as anti-viral
XX therapy, and for determining the stereochemical pathways of certain
XX enzymes which recognise nucleic acids
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 130 CGGATGAAGAAGATCAAAACG 149
Db 21 CGCAAGAAGAAGAGCAAAACG 2
XX
XX RESULT 438
XX ABL01595/c
XX ID ABL01595 standard; DNA; 21 BP.
XX
XX AC ABL01595;
XX
XX DT 15-MAR-2002 (first entry)
XX
XX DE CMV targeted antisense peptide nucleic acid SEQ ID NO: 1.
XX
XX Peptide nucleic acid; PNA; cytostatic; virucide; dermatological;
XX antiasthmatic; overexpression; viral infection; vitiligo; antisense;
XX pigmentation disorder; asthma; polyamide backbone; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 1..21
XX /tag= a
XX /note= "This sequence is a peptide nucleic acid, i.e. it
XX contains a polyamide backbone instead of a deoxyribose
XX backbone"
XX modified_base 1
XX /tag= b
XX /mod_base= OTHER
XX /note= "linked to one of the peptides shown in ABB04517
XX and ABB04518 to form a PNA-peptide conjugate"
XX
XX WO200179216-A2.
XX
XX PN 25-OCT-2001.
XX
XX PD 07-APR-2001; 2001WO-EP004030.
XX
XX PF 18-APR-2000; 2000DE-01019135.
XX
XX PR (AVET ) AVENTIS PHARMA DEUT GMBH.
XX
XX PA Uhlmann E, Breipohl G, Will DW;
XX WPI; 2002-075055/10.
XX
XX New peptide nucleic acid derivatives, useful e.g. for tumor treatment and
XX diagnosis, contain terminal, deprotonizable phosphoryl groups for e.g.
XX improved solubility.
XX
XX Disclosure; Page 18; 93pp; German.
XX
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PD 05-JUN-2001.
XX
XX 11-JAN-2000; 2000US-00481486.
XX
XX 15-OCT-1997; 97US-00950779.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cole DL, Ravikumar VT, Cheruvallath ZS;
XX WPI; 2001-407218/43.
XX
XX Preparing sulfurized 2' substituted phosphorothioate oligonucleotides
XX useful in biological research, comprises phosphorylating the 5'-hydroxyl
XX of a nucleic acid having a nucleoside with a 2' modification.
XX
XX Example 5; Col 6; 7pp; English.
XX
XX The present invention relates to a method for preparing phosphorothioate
XX oligonucleotides having at least one nucleoside with a 2' modification.
XX The method comprises phosphorylating the 5'-hydroxyl of a nucleic acid
XX group having at least one nucleoside with a 2' modification in an
XX acetonitrile. The present sequence was used to illustrate the method of
XX the present invention. The method is useful for synthesising sulphurised
XX 2' substituted phosphorothioate oligonucleotides, which may be used in
XX molecular biological research, in applications such as anti-viral
XX therapy, and for determining the stereochemical pathways of certain
XX enzymes which recognise nucleic acids
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 130 CGGATGAAGAAGATCAAAACG 149
Db 21 CGCAAGAAGAAGAGCAAAACG 2
XX
XX RESULT 438
XX AAC88207/c
XX ID AAC88207 standard; DNA; 21 BP.
XX
XX AC AAC88207;
XX
XX DT 01-MAR-2001 (first entry)
XX
XX DE Modified phosphorothioate 21-mer SEQ ID NO: 3.
XX
XX KW Phosphorothioate oligomer; diagnosis; therapy; disease; AIDS;
XX atherosclerosis; ss.
XX
XX OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..21
XX /tag= a
XX /mod_base= OTHER
XX /note= "phosphorothioate backbone"
XX
XX WO200068241-A1.
XX
XX PN 16-NOV-2000.
XX
XX PD 05-MAY-2000; 2000WO-US012447.
XX
XX PF 06-MAY-1999; 99US-00306278.
XX
XX PR (ISIS-) ISIS PHARM INC.
XX
XX PA Ravikumar VT, Capaldi DC, Cole DT;
XX
```

CC The present invention relates to peptide nucleic acid (PNA) derivatives
CC having at the C-, and optionally N-, terminus one or more phosphoryl
CC groups, at least one of which contains one or more deprotonisable groups;
CC preferably hydroxy or mercapto. These PNAs are useful in the treatment of
CC tumours or any disease associated with (over)expression of particular
CC genes, including viral infections, vitiligo or other pigmentation
CC disorders, and asthma. The present sequence is a peptide nucleic acid
CC described in the exemplification of the invention

XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAAAACG 149
Db 21 CGCAAGAAGAAGAGCAAAACG 2

RESULT 440

ABA97455/c

ID ABA97455 standard; DNA; 21 BP.

XX AC ABA97455;

XX DT 16-APR-2002 (first entry)

XX DE CMV targeted antisense peptide nucleic acid SEQ ID NO: 1.

XX KW Peptide nucleic acid; PNA; polyamide backbone; phosphoryl radical;

XX KW cytosatic; virucide; dermatological; antiasthmatic; cancer; antisense;

XX KW viral infection; vitiligo; pigmentation disorder; asthma; ss.

XX OS Unidentified.

XX OS Synthetic.

XX PN WO200179249-A2.

XX PD 25-OCT-2001.

XX PF 07-APR-2001; 2001WO-EP004027.

XX PR 18-APR-2000; 2000DE-01019136.

XX PA (AVET) AVENTIS PHARMA DEUT GMBH.

XX PI Uhlmann E, Breipohl G, Will DW;

XX PX WPI; 2002-089643/12.

XX PT New peptide nucleic acid derivatives, useful e.g. for treating tumors and

XX PT diagnosis, have N-terminal phosphoryl residue for improving e.g.

XX PT solubility in water.

XX PS Disclosure; Page 74; 96pp; German.

XX CC The present invention relates to peptide nucleic acid (PNA) derivatives.

XX CC These can be used in the treatment of cancer, viral infections, vitiligo

XX CC or other pigmentation disorders, and asthma. The present sequence is an

XX CC oligonucleotide fragment of a PNA described in the exemplification of the

XX CC invention

XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 6e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAAAACG 149

Db 21 CGCAAGAAGAAGAGCAAAACG 2

RESULT 441
ABK99295/c
ID ABK99295 standard; RNA; 21 BP.
XX AC ABK99295;
XX DT 21-OCT-2002 (first entry)
XX DE Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #25.
XX KW Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
XX OS Synthetic.
XX PN US2002064771-A1.
XX PD 30-MAY-2002.
XX PF 06-APR-2001; 2001US-00828034.
XX PR 07-APR-2000; 2000US-0195852P.
XX PA (ZHON/) ZHONG W.
XX PA (HONG/) HONG Z.
XX PA (FERR/) FERRARI E.
XX PI Zhong W, Hong Z, Ferrari E;
XX PX WPI; 2002-582330/62.

XX PT Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
XX PT nucleotide-long template to which a 2 nucleotide-long primer is annealed,
XX PT and template and primer which do not form a stable duplex in the absence
XX PT of HCV NS5B.
XX PS Example; Page 6; 17pp; English.
XX CC The invention relates to a replicase complex comprising a hepatitis C
XX CC virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
XX CC complementary nucleic acid primer which is annealed to the 3' terminus of
XX CC the template, where the template is at least three nucleotides and the
XX CC primer is two or three nucleotides, and the template and primer do not
XX CC form a stable duplex in solution in the absence of the HCV NS5B protein.
XX CC The complex is useful for detecting HCV replicase activity and permits
XX CC establishment of sensitive RNA-dependent RNA polymerase assays to screen
XX CC and evaluate antiviral inhibitors and to improve the specificity and
XX CC efficacy of the inhibitors. The complex is also useful in the development
XX CC of a reliable system for determining kinetic and thermodynamic constants
XX CC of HCV NS5B-catalysed nucleotide incorporation and investigation of
XX CC mechanistic inhibitors for mis-incorporation or chain termination.
XX CC Specifically, the short RNA template and primer pairs are useful in
XX CC screening assays which are used for determining kinetic, thermodynamic
XX CC and mechanistic properties of NS5B replication and ultimately in the
XX CC development of inhibitors of NS5B. Newly identified inhibitors of
XX CC replicase activity may be used for developing anti-HCV pharmaceuticals.
XX CC Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
XX CC templates

SQ Sequence 21 BP; 7 A; 14 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 6e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 231 TGGTGGTGGTGGCGGAGTG 250

Db 21 TGGTGGTGGTGGTGGTGGT 2

RESULT 442

ABK99280/c

ID ABK99280 standard; RNA; 21 BP.

```

XX AC ABK99280;
XX DT 21-OCT-2002 (first entry)
XX DE Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #10.
XX KW Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
XX OS Synthetic.
XX PN US2002064771-A1.
XX PD 30-MAY-2002.
XX PF 06-APR-2001; 2001US-00828034.
XX PR 07-APR-2000; 2000US-0195852P.
XX PA (ZHON/) ZHONG W.
XX PA (HONG/) HONG Z.
XX PA (FERR/) FERRARI E.
XX PI Zhong W, Hong Z, Ferrari E;
XX DR WPI; 2002-582330/62.
XX PT Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
PT nucleotide-long template to which a 2 nucleotide-long primer is annealed,
PT and template and primer which do not form a stable duplex in the absence
PT of HCV NS5B.
XX PS Example; Page 6; 17pp; English.
XX CC The invention relates to a replicase complex comprising a hepatitis C
CC virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
CC complementary nucleic acid primer which is annealed to the 3' terminus of
CC the template, where the template is at least three nucleotides and the
CC primer is two or three nucleotides, and the template and primer do not
CC form a stable duplex in solution in the absence of the HCV NS5B protein.
CC The complex is useful for detecting HCV replicase activity and permits
CC establishment of sensitive RNA-dependent RNA polymerase assays to screen
CC and evaluate antiviral inhibitors and to improve the specificity and
CC efficacy of the inhibitors. The complex is also useful in the development
CC of a reliable system for determining kinetic and thermodynamic constants
CC of HCV NS5B-catalysed nucleotide incorporation and investigation of
CC mechanistic inhibitors for mis-incorporation or chain termination.
CC Specifically, the short RNA template and primer pairs are useful in
CC screening assays which are used for determining kinetic, thermodynamic
CC and mechanistic properties of NS5B replication and ultimately in the
CC development of inhibitors of NS5B. Newly identified inhibitors of
CC replicase activity may be used for developing anti-HCV pharmaceuticals.
CC Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
CC templates
XX SQ Sequence 21 BP; 7 A; 14 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 17; Conservative 0;
QY 230 GTGGTGGTGGTGGCGGCGT 249
DB 20 GTGGTGGTGGTGGTGGT 1
RESULT 443
ABV73946/c
ID ABV73946 standard; DNA; 21 BP.
XX AC ABV73946;
XX DT 13-JAN-2003 (first entry)

```

```

XX Antisense oligonucleotide 5114.
XX DE Immunostimulant; infection; allergy; asthma; cancer; anaemia;
XX KW thrombocytopaenia; neutropaenia; antimicrobial; antiasthmatic;
XX KW cytostatic; antianaemic; antiallergic; haemostatic; antisense;
XX KW phosphorothioate; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..21
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkage"
XX PN WO200269369-A2.
XX PD 06-SEP-2002.
XX PF 10-DEC-2001; 2001WO-IB002888.
XX PR 08-DEC-2000; 2000US-0254341P.
XX PA (COLE-) COLEY PHARM GROUP LTD.
XX PI Schetter C, Vollmer J;
XX DR WPI; 2002-723213/78.
XX PT New compositions comprising CpG-like immunostimulatory nucleic acids,
XX PT useful for treating or preventing infectious diseases, cancer, allergy,
XX PT asthma, immunodeficiency, anemia, thrombocytopenia or neutropenia.
XX PS Example 1; Page 89; 148pp; English.
XX CC The present sequence is that of antisense oligonucleotide (ODN) 5114
CC (Formiversen 13312 ISIS), which was used in an example of the invention
CC in which methylated CpG-like oligonucleotides were compared with
CC unmethylated ODNs for their immunostimulant activity. ODN 5114 exhibited
CC significant stimulatory capability on human B cells, and its
CC corresponding methylated form, ODN 5154 (see ABV73950) also induced
CC stimulation, although to a lesser extent. Methylated CpG, Cpi and Zpi
CC ODNs of the invention (see ABV73935-37) are useful for inducing an immune
CC response in a subject, including humans, for the treatment or prevention
CC of an infectious disease, cancer, allergy or asthma, for enhancing or
CC stimulating bone marrow proliferation in an immunodeficiency,
CC particularly in a subject undergoing chemotherapy, for enhancing
CC erythropoiesis in anaemia, for enhancing thrombopoiesis in
CC thrombocytopaenia, for enhancing neutrophil proliferation in
CC neutropaenia, and for inducing cytokine (e.g. interleukin (IL)-1 beta, IL
CC -2, IL-6, IL-12, IL-18, TNF, interferon-alpha or interferon-gamma)
CC production (all claimed)
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 17; Conservative 0;
QY 130 CGGATGAAGAAGATCAACG 149
DB 21 CGCAAGAGAGAGCAACG 2
RESULT 444
ABV73950/c
ID ABV73950 standard; DNA; 21 BP.
XX AC ABV73950;
XX DT 13-JAN-2003 (first entry)

```

DE Methylated antisense oligonucleotide 5154.
XX Immunostimulant; infection; allergy; asthma; cancer; anaemia;
KW thrombocytopenia; neutropenia; antimicrobial; antiasthmatic;
KW cytostatic; antianaemic; antiallergic; haemostatic; antisense;
KW phosphorothioate; ss.
XX
XX Synthetic.

XX Key Location/Qualifiers
FT modified_base 1. .21
FT /*tag= a
FT /*mod_base= OTHER
FT modified_base 2
FT /*note= "phosphorothioate linkage"
FT /*tag= b
FT /*mod_base= m5c
FT modified_base 8
FT /*tag= c
FT /*mod_base= m5c
FT modified_base 10
FT /*tag= d
FT /*mod_base= m5c
FT modified_base 13
FT /*tag= e
FT /*mod_base= m5c
FT modified_base 16
FT /*tag= f
FT /*mod_base= m5c
FT modified_base 20
FT /*tag= g
FT /*mod_base= m5c

XX W0200269369-A2.

XX 06-SEP-2002.

XX 10-DEC-2001; 2001WO-IB002888.

XX 08-DEC-2000; 2000US-0254341P.

XX (COLE-) COLEY PHARM GROUP LTD.

XX Schetter C, Vollmer J;

XX WPI; 2002-723213/78.

XX New compositions comprising CpG-like immunostimulatory nucleic acids, useful for treating or preventing infectious diseases, cancer, allergy, asthma, immunodeficiency, anemia, thrombocytopenia or neutropenia.

XX Example 1; Page 89; 148pp; English.

XX The present sequence is that of methylated oligonucleotide (ODN) 5154, a methylated version of antisense ODN 5114 (see ABV73946), which was used in an example of the invention in which methylated CpG-like ODNs were compared with unmethylated ODNs for their immunostimulant activity. ODN 5114 exhibited significant stimulatory capability on human B cells. ODN 5154 also induced stimulation, although to a lesser extent. Methylated CpG, Cpi and Zpy ODNs of the invention (see ABV73935-37) are useful for inducing an immune response in a subject, including humans, for the treatment or prevention of an infectious disease, cancer, allergy or asthma, for enhancing or stimulating bone marrow proliferation in an immunodeficiency, particularly in a subject undergoing chemotherapy, for enhancing erythropoiesis in anaemia, for enhancing thrombopoiesis in thrombocytopenia, for enhancing neutrophil proliferation in neutropenia, and for inducing cytokine (e.g. interleukin (IL)-1 beta, IL-2, IL-6, IL-12, IL-18, TNF, interferon-alpha or interferon-gamma) production (all claimed)

XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

XX Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAGAGATCAACG 149
||| ||||| |||||
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 445

ABL90981/C
ID ABL90981 standard; DNA; 21 BP.

XX ABL90981;

XX 27-MAY-2002 (first entry)

XX Cytomegalovirus (CMV) treatment oligonucleotide.

PKC antisense oligonucleotide; protein kinase C; PKC; PKC-alpha;
PKC-beta type I; PKC-beta type II; PKC-gamma; PKC-delta; PKC-epsilon;
PKC-zeta; PKC-eta; PKC expression modulation; ss;
hyperproliferative condition; tumour; glioblastoma; bladder cancer;
breast cancer; colon cancer; lung cancer; inflammatory condition;
psoriasis; phosphorothioate backbone; hepatitis C virus; HCV; ICAM-1;
cytomegalovirus; CMV.

XX Unidentified.

XX US6339066-B1.

XX 15-JAN-2002.

XX 31-MAR-1997; 97US-00829637.

XX 11-JAN-1990; 90US-00463358.

XX 13-AUG-1990; 90US-00566977.

XX 11-JAN-1991; 91WO-US000243.

XX 15-OCT-1991; 91US-00777760.

XX 16-OCT-1991; 91US-00777007.

XX 16-MAR-1992; 92US-00852852.

XX 05-MAY-1993; 93US-00058023.

XX 09-JUL-1993; 93US-00089996.

XX 29-AUG-1994; 94US-00297703.

XX 07-JUN-1995; 95US-00481066.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Dean NM, Cook PD, Hoke G;

XX WPI; 2002-215022/27.

XX New antisense oligonucleotide having nucleoside units which specifically binds mRNA encoding human protein kinase C isoform, useful for treating hyperproliferative and inflammatory diseases e.g. psoriasis, tumor and cancer.

XX Example 19; Col 25; 77pp; English.

XX The invention comprises antisense oligonucleotides designed to bind mRNA encoding a human protein kinase C (PKC) isoform (i.e. PKC-alpha, PKC-beta type I, PKC-beta type II, PKC-gamma, PKC-delta, PKC-epsilon, PKC-zeta, and PKC-eta). The antisense oligonucleotides of the invention are useful for modulating the expression of the PKC isoforms. The antisense oligonucleotides are useful for treating hyperproliferative conditions (e.g. tumour, glioblastoma, bladder cancer, breast cancer, colon cancer and lung cancer), and inflammatory conditions (e.g. psoriasis). The antisense oligonucleotides of the invention are also useful for detection and diagnosis of PKC expression. The present sequence represents an antisense oligonucleotide described in the invention. NOTE: The present sequence contains a phosphorothioate backbone

XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

```
Query Match      0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
DB 21 CGCAAGAGAGAGCAACG 2

RESULT 446
ABK69603/c
ID ABK69603 standard; DNA; 21 BP.
XX
AC ABK69603;
XX
DT 15-JUL-2002 (first entry)
XX
DE Novel G protein-coupled receptor, PCR primer #3.
XX
KW G protein coupled receptor; nootropic; neuroprotective; cytostatic;
KW transgenic; central nervous system disorder; endocrine disorder;
KW metabolic disease; cancer; gene therapy; colocal carcinoma; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200231145-A1.
XX
PD 18-APR-2002.
XX
PF 12-OCT-2001; 2001WO-JP008977.
XX
PR 13-OCT-2000; 2000JP-00313533.
XX
PR 16-NOV-2000; 2000JP-00350057.
XX
PA (TAKEDA ) TAKEDA CHEM IND LTD.
XX
PI Sato S, Shintani Y, Miyajima N, Yoshimura K;
XX
WPI; 2002-362679/39.
XX
PT New human colocal carcinoma-originated G protein-coupled receptor protein for
PT developing drugs e.g. with transgenic animals to treat diseases of the
PT central nervous system, endocrine diseases and cancer.
XX
PS Example 2; Page 168; 210pp; Japanese.
XX
CC The invention relates to a novel colocal carcinoma-originated G protein-
CC coupled receptor protein. The protein and encoded DNAs are for diagnosis
CC and developing drugs e.g. with transgenic animals to treat diseases of
CC the central nervous system, endocrine and metabolic diseases, and cancer,
CC including by gene therapy. ABK69599-ABK69646 represent G protein-coupled
CC receptor protein coding sequences and related primers of the invention
XX
PA (TAKEDA ) TAKEDA CHEM IND LTD.
XX
PI Sato S, Shintani Y, Miyajima N, Yoshimura K;
XX
WPI; 2002-362679/39.
XX
PT New human colocal carcinoma-originated G protein-coupled receptor protein for
PT developing drugs e.g. with transgenic animals to treat diseases of the
PT central nervous system, endocrine diseases and cancer.
XX
PS Example 2; Page 168; 210pp; Japanese.
XX
CC The invention relates to a novel colocal carcinoma-originated G protein-
CC coupled receptor protein. The protein and encoded DNAs are for diagnosis
CC and developing drugs e.g. with transgenic animals to treat diseases of
CC the central nervous system, endocrine and metabolic diseases, and cancer,
CC including by gene therapy. ABK69599-ABK69646 represent G protein-coupled
CC receptor protein coding sequences and related primers of the invention
XX
SQ Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match      0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 396 TGAGGTGCAGTCTCCAGTGA 415
DB 21 TGCCGTGAAGTCTCCAGTGA 2

RESULT 447
ABK69614/c
ID ABK69614 standard; DNA; 21 BP.
XX
AC ABK69614;
XX
DT 15-JUL-2002 (first entry)
XX
DE Novel G protein-coupled receptor, PCR primer #10.
XX
KW G protein coupled receptor; nootropic; neuroprotective; cytostatic;
KW transgenic; central nervous system disorder; endocrine disorder;
KW metabolic disease; cancer; gene therapy; colocal carcinoma; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200231145-A1.
XX
PD 18-APR-2002.
XX
PF 12-OCT-2001; 2001WO-JP008977.
XX
PR 13-OCT-2000; 2000JP-00313533.
XX
PR 16-NOV-2000; 2000JP-00350057.
XX
PA (TAKEDA ) TAKEDA CHEM IND LTD.
XX
PI Sato S, Shintani Y, Miyajima N, Yoshimura K;
XX
WPI; 2002-362679/39.
XX
PT New human colocal carcinoma-originated G protein-coupled receptor protein for
PT developing drugs e.g. with transgenic animals to treat diseases of the
PT central nervous system, endocrine diseases and cancer.
XX
PS Example 2; Page 168; 210pp; Japanese.
XX
CC The invention relates to a novel colocal carcinoma-originated G protein-
CC coupled receptor protein. The protein and encoded DNAs are for diagnosis
CC and developing drugs e.g. with transgenic animals to treat diseases of
CC the central nervous system, endocrine and metabolic diseases, and cancer,
CC including by gene therapy. ABK69599-ABK69646 represent G protein-coupled
CC receptor protein coding sequences and related primers of the invention
XX
SQ Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match      0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 396 TGAGGTGCAGTCTCCAGTGA 415
DB 21 TGCCGTGAAGTCTCCAGTGA 2

RESULT 448
ABK90761/c
ID ABK90761 standard; DNA; 21 BP.
XX
AC ABK90761;
XX
DT 05-NOV-2002 (first entry)
XX
DE Oligomeric compound synthesis method associated polynucleotide #3.
XX
KW Oligomeric synthesis method; diagnostic; therapeutic; antisense agent;
KW antiviral agent; competitive inhibitor; ss.
XX
OS Synthetic.
XX
PN US2002055623-A1.
XX
PD 09-MAY-2002.
XX
PF 11-DEC-2001; 2001US-00016465.
XX
PR 08-JUL-1998; 98US-00111678.
XX
PR 08-JUL-1999; 99US-00349659.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Cheruvallath ZS, Ravikumar VT, Cole DL;
```


XX WPI; 2002-589134/63.
XX
XX New oligomeric compounds containing e.g. phosphite, phosphodiester and
PT phosphorothioate linkages, useful as oligonucleotides or analogs in
PT diagnostics, therapeutics and as research agents.
XX
XX Example 11; Page 20; 33pp; English.
XX
XX The invention describes oligomeric compounds containing a moiety. The
CC oligomeric compounds are useful e.g. as oligonucleotides or
CC oligonucleotide analogues in diagnostics, therapeutics and as research
CC agents. Oligonucleotides and their analogues have been used in molecular
CC biology as probes, primers, linkers, adapters and gene fragments. They
CC may also be useful as antisense agents for various disease states, e.g.
CC antiviral agents, or as competitive inhibitors of transcription factors
CC to modulate their action. Oligonucleotides and their analogues have also
CC been used as direct and indirect regulators of protein, in diagnostic
CC hybridisation techniques, and as primers in PCR reactions. This sequence
CC represents a synthetic polynucleotide created using the oligomeric
CC compounds synthesis method described in the invention
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAAGAGCAACG 2
||| ||||||| |||||
RESULT 449
ABK90765/c
ID ABK90765 standard; DNA; 21 BP.
XX
XX AC ABK90765;
XX
XX 05-NOV-2002 (first entry)
XX
XX Oligomeric compound synthesis method associated polynucleotide #7.
XX
XX Oligomeric synthesis method; diagnostic; therapeutic; antisense agent;
KW antiviral agent; competitive inhibitor; ss.
XX
XX Synthetic.
XX
XX OS
XX US200205623-A1.
XX
XX 09-MAY-2002.
XX
XX 11-DEC-2001; 2001US-00016465.
XX
XX 08-JUL-1998; 98US-00111678.
XX
XX 08-JUL-1999; 99US-00349659.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cheruvallath ZS, Ravikumar VT, Cole DL;
PI WPI; 2002-589134/63.
XX
XX New oligomeric compounds containing e.g. phosphite, phosphodiester and
PT phosphorothioate linkages, useful as oligonucleotides or analogs in
PT diagnostics, therapeutics and as research agents.
XX
XX Example 15; Page 20; 33pp; English.
XX
XX The invention describes oligomeric compounds containing a moiety. The
CC oligomeric compounds are useful e.g. as oligonucleotides or
CC oligonucleotide analogues in diagnostics, therapeutics and as research
CC agents. Oligonucleotides and their analogues have been used in molecular

CC biology as probes, primers, linkers, adapters and gene fragments. They
CC may also be useful as antisense agents for various disease states, e.g.
CC antiviral agents, or as competitive inhibitors of transcription factors
CC to modulate their action. Oligonucleotides and their analogues have also
CC been used as direct and indirect regulators of protein, in diagnostic
CC hybridisation techniques, and as primers in PCR reactions. This sequence
CC represents a synthetic polynucleotide created using the oligomeric
CC compounds synthesis method described in the invention
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAAGAGCAACG 2
||| ||||||| |||||
RESULT 450
AAD39344
ID AAD39344 standard; DNA; 21 BP.
XX
XX AC AAD39344;
XX
XX 04-OCT-2002 (first entry)
XX
XX Human Von Willebrand factor-cleaving protease cloning PCR primer, 6278.
XX
XX Human; Von Willebrand factor-cleaving protease; vWF-cp; therapy; enzyme;
KW transgenic animal; immunisation; thromboembolic disease; preclampsia;
KW thrombotic thrombocytopenic purpura; TTP; Henoch-Schonlein purpura;
KW thrombosis; neonatal thrombocytopenia; haemolytic-uraemic syndrome;
KW transgenic; anticoagulant; RT-PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX WO200242441-A2.
XX
XX 30-MAY-2002.
XX
XX 20-NOV-2001; 2001WO-EP013391.
XX
XX 22-NOV-2000; 2000US-00721254.
XX
XX 12-APR-2001; 2001US-00833328.
XX
XX (BAXT) BAXTER AG.
XX
XX Laemmle B, Gerritsen HE, Furlan M, Turecek P, Schwarz H;
PI Scheiflinger F, Antoine G, Kerschbaumer R, Tagliavacca L;
PI Zimmermann K, Voelkel D;
XX
XX WPI; 2002-479950/51.
XX
XX Novel isolated or substantially purified Von Willebrand factor-cleaving
PT protease, useful for producing preparation for therapy of thrombosis and
PT thromboembolic disease such as thrombotic thrombocytopenic purpura.
XX
XX Example 3; Page 34; 93pp; English.
XX
XX The invention relates to an isolated or substantially pure Von Willebrand
CC factor-cleaving protease (vWF-cp) polypeptide. vWF-cp is useful for
CC purifying vWF which involves providing vWF-cp as a ligand, contacting a
CC solution comprising vWF with the polypeptide ligand under conditions
CC where vWF is bound to the ligand and recovering from the ligand purified
CC vWF. vWF-cp is useful for producing anti-vWF cp polypeptide antibodies
CC which involves immunising an animal with vWF-cp and isolating the anti-
CC vWF cp polypeptide antibodies from the animal. vWF-cp is useful for
CC producing a preparation of prophylaxis and therapy of thrombosis and
CC thromboembolic disease such as thrombotic thrombocytopenic purpura (TTP),
CC Henoch-Schonlein purpura, preclampsia, neonatal thrombocytopenia or
CC haemolytic-uraemic syndrome. vWF-cp can also be used for processing

CC plasmatic or recombinantly produced vWF. The invention is useful for
CC construction expression systems and generating transgenic animals which
CC express the polypeptide in vivo. The present sequence is human vWF-cp
CC gene cloning RT-PCR primer

SQ Sequence 21 BP; 2 A; 8 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 17; Conservative 0

QY 509 GCTACTCTGGAGAGCTGACC 528
DB 2 GCTCCTGCTGGAGCTGACC 21
|||||

RESULT 451
ABT06151
ID ABT06151 standard; DNA; 21 BP.
XX
AC ABT06151;
XX
DT 28-OCT-2002 (first entry)
XX
DE Human light chain lambda gene related oligo SEQ ID No 165.
XX
KW Single Primer Amplification; nested oligonucleotide extension reaction;
KW hairpin; SPA; library; ds.
XX
OS Homo sapiens.
XX
PN WO200248401-A2.
XX
PD 20-JUN-2002.
XX
PF 10-DEC-2001; 2001WO-US047727.
XX
PR 11-DEC-2000; 2000US-0254669P.
PR 19-SEP-2001; 2001US-0323400P.
XX
PA (ALEX-) ALEXION PHARM INC.
XX
PI Bowdish KS, Barbas-Frederickson S, Lin Y, McWhirter J, Maruyama T;
XX WPI; 2002-500537/53.
XX
DR
XX
PT Amplifying nucleic acid by synthesizing template nucleic acid containing
PT a predetermined sequence and hairpin structure and using the template for
PT target amplification by Single Primer Amplification.
XX
PS Example 6; Page 35; 54pp; English.
XX
CC The invention relates to a method for amplifying a nucleic acid using
CC Single Primer Amplification (SPA). The method comprises synthesising a
CC template nucleic acid containing a predetermined sequence and hairpin
CC structure with the nested oligonucleotide extension reaction. The method
CC is useful for amplifying a nucleic acid, preferably for amplifying a
CC family of related nucleic acid sequences to build a complex library of
CC polypeptides encoded by the sequences. The engineered nucleic acid strand
CC is useful for amplifying a nucleic acid strand by providing a nucleic
CC acid with a predetermined sequence engineered onto its first end, a
CC sequence complementary to the predetermined sequence and a hairpin
CC structure between them and contacting the engineered nucleic acid strand
CC with a primer containing at least a portion of the predetermined
CC sequence. This process is done in the presence of a polymerase and
CC nucleotides under conditions suitable for polymerisation to produce a
CC complementary nucleic acid strand. The method of the invention is useful
CC for producing large amounts of a target nucleic acid sequence and for
CC amplifying simultaneously more than one different target nucleic acid
CC sequence located on the same or different nucleic acid molecules. This
CC polynucleotide sequence represents an oligonucleotide relating to the
CC invention
XX

SQ Sequence 21 BP; 5 A; 4 C; 9 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 17; Conservative 0

QY 634 CTGGCGAGGCTACCTATGC 653
DB 1 CTGGGAGAGGGAACCTGTGC 20
|||||

RESULT 452
ABX10631/c
ID ABX10631 standard; DNA; 21 BP.
XX
AC ABX10631;
XX
DT 15-APR-2003 (first entry)
XX
DE Synthetic phosphorothioate oligonucleotide #3.
XX
KW ss; oligomeric compound; phosphite; phosphodiester; phosphorothioate;
KW phosphorodithioate; diagnostic; therapeutic; gene therapy.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..21
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone"
XX
PN US6399756-B1.
XX
PD 04-JUN-2002.
XX
PF 08-JUL-1999; 99US-00349659.
XX
PR 08-JUL-1998; 98US-00111678.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Cheruvallath ZS, Ravikumar VT, Cole DL;
XX WPI; 2002-730487/79.
XX
DR
XX
PT Method for preparation of oligomeric compounds, useful for modulating RNA
PT or DNA which code for a protein, in diagnostics and therapeutics and as
PT research reagents.
XX
PS Example 11; Col 33; 31pp; English.
XX
CC The invention discloses a method for preparation of oligomeric compounds
CC having phosphite, phosphodiester, phosphorothioate, phosphorodithioate or
CC other linkages. The method is useful for preparing oligomeric compounds
CC which are used to modulate RNA or DNA which code for a protein. They can
CC be used in diagnostics, therapeutics (e.g. gene therapy) and as research
CC reagents. The sequence presented is the phosphorothioate oligonucleotide
CC #3, which was synthesised in an example of the invention
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 17; Conservative 0

QY 130 CCGATCGAAGACATCAACG 149
DB 21 CGCAAGAGAGAGCAACG 2
|||||

RESULT 453
ACC49160/c

ID ACC49160 standard; DNA; 21 BP.
XX ACC49160;
AC
XX 19-JUN-2003 (first entry)
DT
XX HCMV inhibitory antisense oligonucleotide SEQ ID NO:3.
DE
XX Inhibition; antisense oligonucleotide; phosphorothioate; bioadhesive;
KW enhanced mucosal drug absorption; antiulcer; antiinflammatory; cancer;
KW antirheumatic; antiarthritic; cytostatic; ulcerative colitis; tumour;
KW rheumatoid arthritis; Crohn's disease; inflammatory bowel disease;
KW cellular proliferation; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..21
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages"
XX
FN WO2003018134-A2.
XX
XX 06-MAR-2003.
PD
XX 22-AUG-2002; 2002WO-US026925.
PF
XX 22-AUG-2001; 2001US-00935316.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Teng C, Weinbach SP, Tillman LG, Geary RS, Hardee GE;
PI
XX WPI; 2003-342432/32.
DR
XX Oral pharmaceutical formulation for delivering bioactive macromolecule
PT to mucosal surface, contains drug, bioadhesive compound, and penetration
PT enhancer.
PT
XX
XX Disclosure; Page 28; 62pp; English.
PS
XX The present invention describes an oral pharmaceutical formulation (I)
CC for delivering a bioactive macromolecule to a mucosal surface. (I)
CC comprises a first population of carrier particles comprising drug and a
CC bioadhesive compound; and a second population of carrier particles
CC comprising a penetration enhancer. Also described is a method for
CC enhancing the mucosal absorption of the bioactive macromolecule in a
CC mammal (preferably a human) by mucosally administering (I). (I) has
CC antiulcer, antiinflammatory, antirheumatic, antiarthritic and cytostatic
CC activities. (I) can be used for delivering a bioactive macromolecule to
CC a mucosal surface. It is used for the oral delivery of a drug to an
CC animal encompassing a human as well as other mammals, reptiles, fish,
CC amphibians and birds. It is used to deliver drugs including peptides,
CC proteins, monoclonal antibodies their fragments, nucleic acids (DNA and
CC RNA), oligonucleotides, antisense oligonucleotides, and small molecules.
CC It can be used to examine the function of various proteins and genes in
CC an animal, including those that are essential to animal development. It
CC can be used for the treatment of animals that are known or suspected to
CC suffer from any disease treatable with the inventive composition, e.g.
CC ulcerative colitis, rheumatoid arthritis, Crohn's disease, inflammatory
CC bowel disease, or undue cellular proliferation (cancers and tumours). The
CC present sequence represents an exemplary oligonucleotide from the present
CC invention, which can be used to inhibit HCMV
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;
Matches 17; Conservative 0; Indels 3; Indels 0; Gaps 0;
QY 130 CGATGAAGAAGATCAAAACG 149
||| | ||||| |||||

Db 21 CGCAAGAAGAAGAGCAAAACG 2
RESULT 454
ABX10710
ID ABX10710 standard; DNA; 21 BP.
XX
XX ABX10710;
AC
XX 15-APR-2003 (first entry)
DT
XX Human glycoprotein hormone Zlut1 PCR primer #6.
DE
XX Human; ss; PCR; Zlut1; glycoprotein hormone; hyperthyroidism;
KW antithyroid; chromosome 14q23.3; primer.
XX
XX Homo sapiens.
OS
XX US2002160953-A1.
PN
XX 31-OCT-2002.
PD
XX 30-AUG-2001; 2001US-00943388.
PF
XX 25-APR-2000; 2000US-0199498P.
PR
XX 20-APR-2001; 2001US-00839706.
PA (HOLL/) HOLLOWAY J L.
PA (WEBS/) WEBSTER P J.
PA (THAY/) THAYER E C.
XX
XX Holloway JL, Webster PJ, Thayer EC;
PI
XX WPI; 2003-209228/20.
DR
XX New Zlut1 polypeptides and polynucleotides, useful for manufacturing a
PT medicament for treating hyperthyroidism.
PT
XX Example 4; Page 45; 51pp; English.
PS
XX The invention relates to an isolated glycoprotein hormone Zlut1 sequence,
CC the mature protein or antigenic peptides derived from Zlut1. Also
CC included are an isolated polynucleotide encoding Zlut1, an isolated
CC antibody that specifically binds to Zlut1, treating hyperthyroidism in
CC female mammals by administering Zlut1 and a pharmaceutical composition
CC comprising Zlut1. Zlut1 is useful for manufacturing a medicament for
CC treating hyperthyroidism. Anti-Zlut1 antibodies can be used to detect
CC Zlut1 in tissue sections from a biopsy specimen or to screen biological
CC samples in vitro for the presence of Zlut1. Zlut1 is useful for treating
CC women with hyperthyroidism. The nucleic acid molecules are useful for
CC detecting the expression of a Zlut1 gene in a biological sample. The
CC present sequence is a human PCR primer used to isolate mouse Zlut1 DNA to
CC use as a probe for detecting Zlut1 genomic DNA
XX
XX Sequence 21 BP; 3 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;
Matches 17; Conservative 0; Indels 3; Indels 0; Gaps 0;
QY 163 ACATCCGAGGTGGCGGAGG 182
||||| ||||| ||||| |||||
Db 2 ACATCCGAGGTGGCGAGTGG 21
||||| ||||| ||||| |||||
RESULT 455
ACC59014/c
ID ACC59014 standard; DNA; 21 BP.
XX
XX ACC59014;
AC
XX 01-JUL-2003 (first entry)
DT
XX

DE Human IE-2 antisense oligonucleotide.
XX
XX Human; antisense; transcobalamin receptor; intrinsic factor receptor;
KW cytosolic; antiviral; anti-HIV; hepatotropic; antiinflammatory;
XX virucide; tuberculostatic; protozoacide; cancer; viral disease; ss; IE-2.
XX
OS Homo sapiens.
XX
XX WO2003025139-A2.
PN
XX 27-MAR-2003.
PD
XX
XX 17-SEP-2002; 2002WO-US029571.
PF
XX
XX 17-SEP-2001; 2001US-0322821P.
PR
XX 13-SEP-2002; 2002US-0410627P.
PD
XX
XX (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
PA
XX Collins DA, Callstrom M, Prendergast FG;
PI
XX WPI; 2003-430085/40.
DR
XX
XX Compound useful for treating e.g. cancer comprises optionally stabilized
PT nucleic acid, aptamer, antisense sequence, or antisense mimic conjugated
PT to a ligand for the transcobalamin receptor or intrinsic factor receptor.
PT
XX Disclosure; Page 88; 156pp; English.
PS
XX The invention relates to a novel compound comprising an optionally
CC stabilised nucleic acid or its analogue encoding a peptide, protein or
CC other biological modifier, aptamer, antisense sequence, or antisense
CC mimic conjugated directly or through a linker to a ligand for the
CC transcobalamin receptor or intrinsic factor receptor. A compound of the
CC invention has cytostatic, antiviral, anti-HIV, hepatotropic,
CC antiinflammatory, virucide, tuberculostatic, and protozoacide activity.
CC The compounds may be useful in the manufacture of a medicament for the
CC delivery of material that affects gene translation or gene transcription
CC and modulates a biological process, in medical therapy. A compound is
CC also useful for treating cancer, viral diseases such as infection caused
CC by HIV, hepatitis (hepatitis B, hepatitis C and hepatitis D), herpes, TB,
CC Epstein-Barr virus, malaria, influenza virus, Para influenza virus, mumps
CC virus, adenoviruses, reoviruses, respiratory syncytial virus,
CC rhinoviruses, polioviruses, coxsackie-viruses, echoviruses,
CC enteroviruses, gastroenteritis viruses, rubella viruses, rubella virus,
CC mollusum ventigosum virus, human parvovirus B19, cytomegalovirus, human
CC papillomavirus, varicella zoster, arenaviruses or filoviruses. The
CC present sequence is used in the exemplification of the invention
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 130 CGGATGAGAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 456
ACCS9001/c
ID ACCS9001 standard; DNA; 21 BP.
XX
XX ACCS9001;
AC
XX
XX 01-JUL-2003 (first entry)
DT
XX
DE Human IE-2 antisense oligonucleotide.
XX
XX Human; antisense; transcobalamin receptor; intrinsic factor receptor;
KW cytosolic; antiviral; anti-HIV; hepatotropic; antiinflammatory;
KW virucide; tuberculostatic; protozoacide; cancer; viral disease; ss; IE-2.

XX Homo sapiens.
OS
XX WO2003025139-A2.
PN
XX 27-MAR-2003.
PD
XX
XX 17-SEP-2002; 2002WO-US029571.
PF
XX
XX 17-SEP-2001; 2001US-0322821P.
PR
XX 13-SEP-2002; 2002US-0410627P.
PD
XX
XX (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
PA
XX Collins DA, Callstrom M, Prendergast FG;
PI
XX WPI; 2003-430085/40.
DR
XX
XX Compound useful for treating e.g. cancer comprises optionally stabilized
PT nucleic acid, aptamer, antisense sequence, or antisense mimic conjugated
PT to a ligand for the transcobalamin receptor or intrinsic factor receptor.
PT
XX Disclosure; Page 87; 156pp; English.
PS
XX The invention relates to a novel compound comprising an optionally
CC stabilised nucleic acid or its analogue encoding a peptide, protein or
CC other biological modifier, aptamer, antisense sequence, or antisense
CC mimic conjugated directly or through a linker to a ligand for the
CC transcobalamin receptor or intrinsic factor receptor. A compound of the
CC invention has cytostatic, antiviral, anti-HIV, hepatotropic,
CC antiinflammatory, virucide, tuberculostatic, and protozoacide activity.
CC The compounds may be useful in the manufacture of a medicament for the
CC delivery of material that affects gene translation or gene transcription
CC and modulates a biological process, in medical therapy. A compound is
CC also useful for treating cancer, viral diseases such as infection caused
CC by HIV, hepatitis (hepatitis B, hepatitis C and hepatitis D), herpes, TB,
CC Epstein-Barr virus, malaria, influenza virus, Para influenza virus, mumps
CC virus, adenoviruses, reoviruses, respiratory syncytial virus,
CC rhinoviruses, polioviruses, coxsackie-viruses, echoviruses,
CC enteroviruses, gastroenteritis viruses, rubella viruses, rubella virus,
CC mollusum ventigosum virus, human parvovirus B19, cytomegalovirus, human
CC papillomavirus, varicella zoster, arenaviruses or filoviruses. The
CC present sequence is used in the exemplification of the invention
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 130 CGGATGAGAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 457
ABZ79922/c
ID ABZ79922 standard; DNA; 21 BP.
XX
XX ABZ79922;
AC
XX
XX 19-MAY-2003 (first entry)
DT
XX
DE Human TGR23-2 ligand related PCR primer SEQ ID NO:34.
XX
XX Neuroprotective; vasotropic; gastrointestinal; immunological; cytostatic;
KW GPCR binding modulation; ligand; GPCR; G protein-coupled receptor;
KW binding; central nervous system disorder; circulatory disorder; cancer;
KW digestive disorder; immune system disorder; metabolic disease; human;
KW TGR23-2 ligand; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.

```
XX WO2003007187-A1.
PN
XX
XX 23-JAN-2003.
PD
XX
XX 11-JUL-2002; 2002WO-JP007057.
PF
XX
XX 12-JUL-2001; 2001JP-00212749.
PR
XX
XX (TAKE ) TAKEDA CHEM IND LTD.
PA
XX
XX Inooka H, Yamamoto Y;
PI
XX
XX WPI; 2003-229505/22.
PD
XX
XX Computer-based method for estimating and presuming ligands or their types
PT that directly bind to e.g. GPCR from sequence data, applicable in
PT identifying proteins and functional analysis, and in drug development.
PS
XX Example; Page 98; 107pp; Japanese.
XX
XX The present invention describes a method for presuming a binding molecule
CC e.g. ligand of a protein with unknown ligand comprises: (a) obtaining
CC classification data of proteins with known ligands based on the amino
CC acid sequences wherein the alignments of such known ligands correspond
CC respectively to the ligands or ligand types; (b) using the classification
CC data to provide ligand-determining residue-ligand classification data
CC that show the co-relationships among ligand-determining residues and
CC ligands or ligand types to thereby obtaining the alignments of proteins
CC with unknown ligands for specifying 1 or more ligand-determining residue
CC positions; (c) applying the data at least concerning the ligand-
CC determining residues in the alignments of proteins with unknown ligands
CC to the ligand-determining residue-ligand classification data; and (d)
CC estimating the ligand or its type of the protein with the unknown ligand.
CC Ligands can have neuroprotective, vasotropic, gastrointestinal,
CC immunological and cytostatic activities, and can be used for modulating G
CC protein-coupled receptor (GPCR) binding. The method can be used for
CC estimating and presuming ligands or their types directly binding e.g. to
CC GPCR from sequence data, applicable in identifying proteins and analysis
CC of their functions, and in drug development for preventing or treating
CC diseases of the central nervous system, circulatory, digestive and immune
CC systems, cancer, and metabolic diseases. The present sequence represents
CC a PCR primer for human TGR23-2 ligand, which is used in an example from
CC the present invention
XX
XX Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 396 TGAGGTGAGTCTCCAGTGA 415
DB 21 TGCCGTGAAGTCTCCAGTGA 2
|| ||| ||||| |||||
RESULT 458
ACA61364/c
ID ACA61364 standard; RNA; 21 BP.
XX
XX ACA61364;
AC
XX
XX 11-AUG-2003 (first entry)
DT
XX
XX Antiviral screening immunoassay oligonucleotide #1.
DE
XX
XX Antiviral screening; immunoassay; ss; nuclease inhibitor; gene therapy;
KW AIDS; bacterial infection; viral infection; protozoan infection;
KW abnormal cell proliferation; tumour formation; atherosclerosis.
XX
XX Unidentified.
OS
XX Synthetic.
OS
XX
```

```
FH Key Location/Qualifiers
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-methyl nucleotides"
FT 17..21
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-methyl nucleotides"
XX
PN US2003004325-A1.
PD
XX 02-JAN-2003.
PD
XX 28-NOV-2001; 2001US-00996263.
PF
XX 11-JAN-1990; 90US-00463358.
PR 13-AUG-1990; 90US-00566977.
PR 11-JAN-1991; 91WO-US000243.
PR 12-AUG-1991; 91WO-US0005720.
PR 24-DEC-1991; 91US-00814961.
PR 05-MAR-1992; 92US-00835932.
PR 01-JUL-1992; 92US-00854634.
PR 23-DEC-1992; 92WO-US011339.
PR 21-JUN-1994; 94US-00244993.
PR 06-JUN-1995; 95US-00471973.
PR 17-AUG-1998; 98US-00135202.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Cook PD, Kawasaki AM;
PI
XX WPI; 2003-438873/41.
DR
XX New nuclease resistant compounds, useful as therapeutics, diagnostic
PT agents, or research reagents, or for treating an organism with a disease
PT associated with the undesired production of a protein, e.g. bacterial
PT infections or AIDS.
XX
XX Example 34; Page 31; 50pp; English.
PS
XX The invention relates to a nuclease resistant compound that hybridises
CC with RNA or DNA, comprising covalently-bound nucleosides that
CC individually include a ribose of deoxyribose sugar portion and a base
CC portion. The nuclease resistant compounds are useful as therapeutics,
CC diagnostic agents, or research reagents. The compounds are also useful
CC for modulating the activity of an RNA or DNA molecule, or for treating an
CC organism with a disease associated with the undesired production of a
CC protein, e.g. bacterial, viral or protozoan infections, AIDS, abnormal
CC cell proliferation and tumour formation, or atherosclerosis. The present
CC sequence represents the antiviral screening immunoassay oligonucleotide
CC #1
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAACG 149
DB 21 CGCAAGAGAGAGACCAACG 2
|| ||| ||||| |||||
RESULT 459
ACA61365/c
ID ACA61365 standard; RNA; 21 BP.
XX
XX ACA61365;
AC
XX
XX 11-AUG-2003 (first entry)
DT
XX
XX Antiviral screening immunoassay oligonucleotide #2.
DE
```

```

XX Antiviral screening; immunoassay; ss; nuclease inhibitor; gene therapy;
KW AIDS; bacterial infection; viral infection; protozoan infection;
KW abnormal cell proliferation; tumour formation; atherosclerosis.
XX
OS Unidentified.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..7
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-methyl nucleotides"
FT modified_base 15..21
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-methyl nucleotides"
XX
PN US2003004325-A1.
XX
PD 02-JAN-2003.
XX
PF 28-NOV-2001; 2001US-00996263.
XX
PR 11-JAN-1990; 90US-00463358.
PR 13-AUG-1990; 90US-00566977.
PR 11-JAN-1991; 91WO-US000243.
PR 12-AUG-1991; 91WO-US005720.
PR 24-DEC-1991; 91US-00814961.
PR 05-MAR-1992; 92US-00835932.
PR 01-JUL-1992; 92US-00854634.
PR 23-DEC-1992; 92WO-US011339.
PR 21-JUN-1994; 94US-00244993.
PR 06-JUN-1995; 95US-00471973.
PR 17-AUG-1998; 98US-00135202.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Cook PD, Kawasaki AM;
XX WPI; 2003-438873/41.
XX
PT New nuclease resistant compounds, useful as therapeutics, diagnostic
PT agents, or research reagents, or for treating an organism with a disease
PT associated with the undesired production of a protein, e.g. bacterial
PT infections or AIDS.
XX
PS Example 34; Page 31; 50pp; English.
XX
CC The invention relates to a nuclease resistant compound that hybridises
CC with RNA or DNA, comprising covalently-bound nucleosides that
CC individually include a ribose or deoxyribose sugar portion and a base
CC portion. The nuclease resistant compounds are useful as therapeutics,
CC diagnostic agents, or research reagents. The compounds are also useful
CC for modulating the activity of an RNA or DNA molecule, or for treating an
CC organism with a disease associated with the undesired production of a
CC protein, e.g. bacterial, viral or protozoan infections, AIDS, abnormal
CC cell proliferation and tumour formation, or atherosclerosis. The present
CC sequence represents the antiviral screening immunoassay oligonucleotide
CC #2
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
XX
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 130 CGGATGAAGAGATCAACG 149
Db ||| ||||| ||||| |||||
21 CGCAGAGAGAGAGCAACG 2
XX
RESULT 460
AD24653/c
ID ADC24653 standard; DNA; 21 BP.
XX
AC ADC24653;
XX
DT 18-DEC-2003 (first entry)
XX
DE Antisense DNA #1 that can be conjugated to the carriers of invention.
XX cobalamin-bound detectable; radioimaging; infectious disease;
KW cardiovascular disorder; antibiotic; antiviral agent; ss.
XX Synthetic.
XX WO2003026674-A1.
XX

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ADC24666/c
ID ADC24666 standard; DNA; 21 BP.
XX
AC ADC24666;
XX
DT 18-DEC-2003 (first entry)
XX
DE Antisense DNA #14 that can be conjugated to the carriers of invention.
XX cobalamin-bound detectable; radioimaging; infectious disease;
KW cardiovascular disorder; antibiotic; antiviral agent; ss.
XX Synthetic.
XX WO2003026674-A1.
XX
PD 03-APR-2003.
XX
PF 30-SEP-2002; 2002WO-US031038.
XX
PR 28-SEP-2001; 2001US-0326183P.
XX
PA (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
XX
PI Collins DA;
XX
PR WPI; 2003-393314/37.
XX
PT Composition useful for the treatment of e.g. infectious disease,
PT comprises a cobalamin-bound detectable or therapeutic agent in
PT combination with a cobalamin transport protein.
XX
PS Example 4; SEQ ID NO 14; 97pp; English.
XX
CC The present invention relates to a cobalamin-bound detectable or
CC therapeutic agent in combination with a cobalamin transport protein. In
CC the manufacture of a medicament to increase the uptake of detectable
CC agent useful in radioimaging or therapeutic agent for treatment of a
CC disease associated with abnormal cellular proliferation, an infectious
CC disease and cardiovascular disorder; as an antibiotic or antiviral agent;
CC for transcription of a factor. The method increases efficiency of
CC vitamin B12 or vitamin B12 conjugated materials. The presents sequence
CC represents an antisense nucleotide that can be conjugated to the carriers
CC described in the present invention.
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 130 CGGATGAAGAGATCAACG 149
Db ||| ||||| ||||| |||||
21 CGCAGAGAGAGAGCAACG 2
XX
RESULT 461
AD24653/c
ID ADC24653 standard; DNA; 21 BP.
XX
AC ADC24653;
XX
DT 18-DEC-2003 (first entry)
XX
DE Antisense DNA #1 that can be conjugated to the carriers of invention.
XX cobalamin-bound detectable; radioimaging; infectious disease;
KW cardiovascular disorder; antibiotic; antiviral agent; ss.
XX Synthetic.
XX WO2003026674-A1.
XX

```

PD 03-APR-2003.
XX
XX
PF 30-SEP-2002; 2002WO-US031038.
XX
XX 28-SEP-2001; 2001US-0326183P.
XX
PA (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
XX
PA Collins DA;
XX
XX WPI; 2003-393314/37.
DR
XX Composition useful for the treatment of e.g. infectious disease,
PT comprises a cobalamin-bound detectable or therapeutic agent in
PT combination with a cobalamin transport protein.
XX
XX Example 4; SEQ ID NO 1; 97pp; English.
PS
XX The present invention relates to a cobalamin-bound detectable or
CC therapeutic agent in combination with a cobalamin transport protein. In
CC the manufacture of a medicament to increase the uptake of detectable
CC agent useful in radioimaging or therapeutic agent for treatment of a
CC disorder associated with abnormal cellular proliferation, an infectious
CC disease and cardiovascular disorder; as an antibiotic or antiviral agent;
CC for transcription of al factor. The method increases efficiency of
CC vitamin B12 or vitamin B12 conjugated materials. The presents sequence
CC represents an antisense nucleotide that can be conjugated to the carriers
CC described in the present invention.
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAAAACG 149
DB 21 CGCAAGAGAGAGCAACG 2
RESULT 462
AAD59026/c
ID AAD59026 standard; DNA; 21 BP.
XX
AC AAD59026;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human cytomegalovirus (HCMV) gene specific antisense oligo, ISIS 2922.
XX
KW Inflammatory bowel disorder; ulcerative colitis; Crohn's disease;
KW cellular proliferation; Human cytomegalovirus; HCMV; antisense;
KW phosphorothioate backbone; ss.
XX
OS Human cytomegalovirus.
OS
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..21
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; Optionally all
FT cytidines are 5-methyl cytidines"
FT modified_base 1..6
FT /tag= b
FT /mod_base= OTHER
FT /note= "Optionally 2'methoxyethyl nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "Optionally 2'methoxyethyl nucleotides"
XX
PN US2003040497-A1.

XX 27-FEB-2003.
PD
XX
PF 21-DEC-2001; 2001US-00029598.
XX
XX 01-JUL-1997; 97US-00886829.
PR 01-JUL-1998; 98US-00108673.
PR 20-MAY-1999; 99US-00315298.
XX
XX (TENG/) TENG C.
PA (COOK/) COOK P D.
PA (TILL/) TILLMAN L.
PA (HARD/) HARDEE G E.
PA (ECKE/) ECKER D J.
PA (MANO/) MANOHARAN M.
XX
PI Teng C, Cook PD, Tillman L, Hardee GE, Ecker DJ, Manoharan M;
XX WPI; 2003-596370/56.
XX Formulation, useful for treating inflammatory bowel disorder, e.g.
PT ulcerative colitis or Crohn's disease, comprises oligonucleotide for
PT rectal delivery.
XX
XX Example 2; Page 11; 45pp; English.
XX
CC The invention relates to formulations and methods which enhance the local
CC and systemic uptake and delivery of oligonucleotides and nucleic acids
CC via non-parenteral routes of administration. The formulation is used for
CC treating inflammatory bowel disorders, e.g. ulcerative colitis, Crohn's
CC disease or inflammatory bowel disease, in animals (e.g. human). It can
CC also be used for treating undue cellular proliferation. The present
CC sequence is an antisense oligonucleotide targetted against Human
CC cytomegalovirus (HCMV) gene. This sequence is used to illustrate the
CC method of the invention
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAAAACG 149
DB 21 CGCAAGAGAGAGCAACG 2
RESULT 463
AAD59034/c
ID AAD59034 standard; DNA; 21 BP.
XX
AC AAD59034;
XX
DT 18-DEC-2003 (first entry)
XX
DE Antisense oligonucleotide #2.
XX
KW Inflammatory bowel disorder; ulcerative colitis; Crohn's disease;
KW cellular proliferation; phosphorothioate backbone; antisense; ss.
XX
OS Unidentified.
FH Key Location/Qualifiers
FT modified_base 1..21
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..7
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 2
FT /tag= c

```
FT modified_base 8 /mod_base= m5c
FT FT /*tag= d
FT FT /mod_base= m5c
FT modified_base 10
FT FT /*tag= e
FT FT /mod_base= m5c
FT modified_base 13
FT FT /*tag= f
FT FT /mod_base= m5c
FT modified_base 16
FT FT /*tag= g
FT FT /mod_base= m5c
FT modified_base 20
FT FT /*tag= h
FT FT /mod_base= m5c
XX
XX US2003040497-A1.
XX
XX 27-FEB-2003.
XX
XX 21-DEC-2001; 2001US-00029598.
XX
XX 01-JUL-1997; 97US-00886829.
XX 01-JUL-1998; 98US-00108673.
XX 20-MAY-1999; 99US-00315298.
XX
XX (TENG/) TENG C.
XX (COOK/) COOK P D.
XX (TILL/) TILLMAN L.
XX (HARD/) HARDEE G E.
XX (ECKE/) ECKER D J.
XX (MANO/) MANOHARAN M.
XX
XX Teng C, Cook PD, Tillman L, Hardee GE, Ecker DJ, Manoharan M;
PI WPI; 2003-596370/56.
XX
XX Formulation, useful for treating inflammatory bowel disorder, e.g.
XX ulcerative colitis or Crohn's disease, comprises oligonucleotide for
XX rectal delivery.
XX
XX Disclosure; Page 43; 45pp; English.
XX
XX The invention relates to formulations and methods which enhance the local
XX and systemic uptake and delivery of oligonucleotides and nucleic acids
XX via non-parenteral routes of administration. The formulation is used for
XX treating inflammatory bowel disorders, e.g. ulcerative colitis, Crohn's
XX disease or inflammatory bowel disease, in animals (e.g. human). It can
XX also be used for treating undue cellular proliferation. The present
XX sequence is an antisense oligonucleotide used to illustrate the method of
XX the invention
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
DB 21 CGCAAGAAGAAGAGCAACG 2

RESULT 464
ADD44701/c
ID ADD44701 standard; DNA; 21 BP.
XX
XX AC ADD44701;
XX
XX 15-JAN-2004 (first entry)
DT
XX CMV antisense oligonucleotide #1.
DE
```

```
XX
XX CMV; ss; antisense; virucide; anti-HIV; antiarteriosclerotic; cytostatic;
XX 2'-fluoro substituent; AIDS; atherosclerosis; cancer; DNA-RNA hybrid.
XX
XX Human herpesvirus 5.
XX
XX US2003187240-A1.
XX
XX 02-OCT-2003.
XX
XX 28-JAN-2003; 2003US-00352586.
XX
XX 11-JAN-1990; 90US-00463358.
XX 13-AUG-1990; 90US-00566977.
XX 05-MAR-1992; 92US-00835932.
XX 06-JUN-1995; 95US-00468037.
XX 02-SEP-1999; 99US-00389283.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cook PD, Kawasaki AM;
XX
XX WPI; 2003-831271/77.
XX
XX Modified oligonucleotides useful as therapeutics, diagnostics and
XX research agents comprises several covalently bound nucleosides joined by
XX internucleoside linkages.
XX
XX Example 34; SEQ ID NO 18; 48pp; English.
XX
XX The invention relates to a modified oligonucleotide comprising several
XX covalently bound nucleosides including a ribose or deoxyribose sugar
XX portion and a base portion. The nucleosides are joined together by
XX internucleoside linkages such that the base portion of the nucleosides
XX form a mixed base sequence. At least one of the nucleosides includes a
XX modified ribofuranosyl moiety bearing a 2'-fluoro substituent. The
XX antisense oligonucleotides of the invention are useful as therapeutics,
XX diagnostics and research agents e.g. for the treatment of various viruses
XX (e.g. AIDS), for modulating the production of proteins by an organism,
XX treating an organism having a disease involving an undesired production
XX of a protein (e.g. atherosclerosis, cancer), detecting the presence or
XX absence of abnormal RNA molecules, or abnormal or inappropriate
XX expression of normal RNA molecules in organisms or cells, and for the
XX selective binding of RNA for use as research reagents and diagnostic
XX agents. The compounds have improved stability to enzymatic degradation
XX with various intracellular and extracellular nucleases, and improved
XX ability to bind to a specific DNA or RNA with fidelity compared to wild-
XX type DNA-DNA and RNA-DNA duplexes and phosphorus-modified oligonucleotide
XX duplexes containing methylphosphonates, phosphoramidates and phosphate
XX triesters. The present sequence is an antisense oligonucleotide of the
XX invention targeting CMV replication.
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
SQ Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
DB 21 CGCAAGAAGAAGAGCAACG 2

RESULT 465
AD112091/c
ID AD112091 standard; DNA; 21 BP.
XX
XX AC AD112091;
XX
XX 15-APR-2004 (first entry)
DT
XX Antiviral screening antisense oligonucleotide ISIS #4325.
DE
XX
```


KW ss; nuclease resistant; mixed sequence; 2'-deoxyfuranosyl; antisense;
XX DNA-RNA hybrid.
XX Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1. .21
FT /*tag= b
FT /mod_base= OTHER
FT methyl
FT 1. .5
FT /*tag= a
FT misc_RNA 17. .21
FT /*tag= c
XX
PN US6531584-B1.
XX
XX 11-MAR-2003.
XX
XX 02-SEP-1999; 99US-00389283.
XX
XX 11-JAN-1990; 90US-00463358.
XX 13-AUG-1990; 90US-00566977.
XX 05-MAR-1992; 92US-00835932.
XX 01-JUL-1992; 92US-00854634.
XX 06-JUN-1995; 95US-00468037.
XX 05-MAR-1998; 98US-00035357.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cook PD, Kawasaki AM;
XX WPI; 2003-566474/53.
XX
PT Nuclease resistant mixed sequence oligonucleotides useful as
PT therapeutics, diagnostics, and research agents comprise at least one
PT modified 2'-deoxyfuranosyl group.
XX
XX Example 34; SEQ ID NO 18; 48pp; English.
XX
CC The invention relates to a nuclease resistant mixed sequence
CC oligonucleotides comprising at least one modified 2'-deoxyfuranosyl
CC group. The modified oligonucleotides are disclosed as being useful for
CC modulating the production of a protein by an organism, and especially for
CC treating a disease in an organism which is characterised by the undesired
CC production of a protein. The oligonucleotides may be used to treat
CC diseases caused by viruses or other agents. The oligonucleotides may also
CC be used for diagnostic methods for detecting the presence or absence of
CC abnormal RNA molecules, or for detecting the inappropriate expression of
CC normal RNA molecules in an organism or cell. Oligonucleotides of the
CC invention that selectively bind RNA may also be useful as research
CC reagents. The new oligonucleotides are nuclease resistant and hybridise
CC to RNA or DNA targets with high strength and specificity. The present
CC sequence represents an antiviral screening antisense oligonucleotide.
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAGAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2
RESULT 466
AD112092/c
ID AD112092 standard; DNA; 21 BP.
XX
XX AC AD112092;
XX

DT 15-APR-2004 (first entry)
XX
XX Antiviral screening antisense oligonucleotide ISIS #4326.
XX
KW ss; nuclease resistant; mixed sequence; 2'-deoxyfuranosyl; antisense;
KW DNA-RNA hybrid.
XX
XX Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1. .21
FT /*tag= b
FT /mod_base= OTHER
FT methyl
FT 1. .6
FT /*tag= a
FT misc_RNA 15. .21
FT /*tag= c
XX
XX US6531584-B1.
XX
XX 11-MAR-2003.
XX
XX 02-SEP-1999; 99US-00389283.
XX
XX 11-JAN-1990; 90US-00463358.
XX 13-AUG-1990; 90US-00566977.
XX 05-MAR-1992; 92US-00835932.
XX 01-JUL-1992; 92US-00854634.
XX 06-JUN-1995; 95US-00468037.
XX 05-MAR-1998; 98US-00035357.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cook PD, Kawasaki AM;
XX WPI; 2003-566474/53.
XX
PT Nuclease resistant mixed sequence oligonucleotides useful as
PT therapeutics, diagnostics, and research agents comprise at least one
PT modified 2'-deoxyfuranosyl group.
XX
XX Example 34; SEQ ID NO 19; 48pp; English.
XX
CC The invention relates to a nuclease resistant mixed sequence
CC oligonucleotides comprising at least one modified 2'-deoxyfuranosyl
CC group. The modified oligonucleotides are disclosed as being useful for
CC modulating the production of a protein by an organism, and especially for
CC treating a disease in an organism which is characterised by the undesired
CC production of a protein. The oligonucleotides may be used to treat
CC diseases caused by viruses or other agents. The oligonucleotides may also
CC be used for diagnostic methods for detecting the presence or absence of
CC abnormal RNA molecules, or for detecting the inappropriate expression of
CC normal RNA molecules in an organism or cell. Oligonucleotides of the
CC invention that selectively bind RNA may also be useful as research
CC reagents. The new oligonucleotides are nuclease resistant and hybridise
CC to RNA or DNA targets with high strength and specificity. The present
CC sequence represents an antiviral screening antisense oligonucleotide.
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAGAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2
RESULT 467
ABZ75968/c

```

ID ABZ75968 standard; DNA; 21 BP.
XX AC
XX ABZ75968;
XX 29-MAY-2003 (first entry)
XX DE
XX HCMV mRNA targeting oligonucleotide ISIS 13312.
XX KW
XX ICAM-1; desulphurization; antioxidant; HCMV; antisense; ss.
XX OS
XX Synthetic.
XX PN
XX WO2003005822-A1.
XX PD
XX 23-JAN-2003.
XX PF
XX 11-JUL-2002; 2002WO-US022038.
XX PR
XX 11-JUL-2001; 2001US-00902953.
XX PA
XX (ISIS-) ISIS PHARM INC.
XX PI
XX Krotz AH, Mehta R;
XX WPI; 2003-229426/22.
XX DR
XX Preventing desulfurization of oligonucleotide comprising phosphorothioate
XX PT linkages in bi-phasic/multi-phasic formulation, by adding to formulation
XX PT an antioxidant that partitions into aqueous phase of the formulation.
XX XX
XX Disclosure; Page 23; 51pp; English.
XX PS
XX The invention relates to preventing desulphurization of an
XX CC oligonucleotide or its bioequivalent comprising one or more
XX CC phosphorothioate linkages in a bi-phasic or multi-phasic formulation. The
XX CC method involves including in the formulation an antioxidant which
XX CC partitions into the aqueous phase of the formulation. The method is
XX CC useful for increasing the stability of oligonucleotide comprising
XX CC phosphorothioate linkages. Sequences ABZ75968-976 represent specific
XX CC oligonucleotides that target genes and that may be employed in the
XX CC formulations of the present invention
XX SQ
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAAACG 149
Db 21 CGCAAGAAGAAGAGCAAAACG 2

RESULT 468
ACC49171/c
ID ACC49171 standard; DNA; 21 BP.
XX AC
XX ACC49171;
XX DT
XX 19-JUN-2003 (first entry)
XX DE
XX HCMV inhibitory antisense oligonucleotide SEQ ID NO:3.
XX KW
XX Inhibition; phosphorothioate; delayed release oral formulation;
XX KW enhanced gastrointestinal absorption; ulcerative colitis;
XX KW rheumatoid arthritis; Crohn's disease; inflammatory bowel disease;
XX KW abnormal cellular proliferation; ss.
XX OS
XX Synthetic.
XX FH
XX Key Location/Qualifiers
XX modified_base 1..21
XX FT
XX /*tag= a

ABZ75968 standard; DNA; 21 BP.
AC
ABZ75968;
29-MAY-2003 (first entry)
HCMV mRNA targeting oligonucleotide ISIS 13312.
ICAM-1; desulphurization; antioxidant; HCMV; antisense; ss.
Synthetic.
WO2003005822-A1.
23-JAN-2003.
11-JUL-2002; 2002WO-US022038.
11-JUL-2001; 2001US-00902953.
(ISIS-) ISIS PHARM INC.
Krotz AH, Mehta R;
WPI; 2003-229426/22.
Preventing desulfurization of oligonucleotide comprising phosphorothioate
linkages in bi-phasic/multi-phasic formulation, by adding to formulation
an antioxidant that partitions into aqueous phase of the formulation.
Disclosure; Page 23; 51pp; English.
The invention relates to preventing desulphurization of an
oligonucleotide or its bioequivalent comprising one or more
phosphorothioate linkages in a bi-phasic or multi-phasic formulation. The
method involves including in the formulation an antioxidant which
partitions into the aqueous phase of the formulation. The method is
useful for increasing the stability of oligonucleotide comprising
phosphorothioate linkages. Sequences ABZ75968-976 represent specific
oligonucleotides that target genes and that may be employed in the
formulations of the present invention
Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAAACG 149
Db 21 CGCAAGAAGAAGAGCAAAACG 2

RESULT 469
ACC68813/c
ID ACC68813 standard; DNA; 21 BP.
XX AC
XX ACC68813;
XX DT
XX 02-JUL-2003 (first entry)
XX DE
XX Human TGR23-2 PCR primer SEQ ID NO:9.
XX KW
XX G protein-coupled receptor; GPCR; TGR23-2; TGR23-1; TGR23; anorectic;
XX KW cytosstatic; obesity disorder; cancer; appetite stimulation; PCR primer;
XX KW ss.
XX OS
XX Homo sapiens.
XX Synthetic.
XX PN
XX WO2003025179-A1.
XX PD
XX 27-MAR-2003.
XX FT
XX 13-SEP-2002; 2002WO-JP009446.

/mod_base= OTHER
/note= "phosphorothioate linkages"
WO2003017940-A2.
06-MAR-2003.
22-AUG-2002; 2002WO-US026924.
22-AUG-2001; 2001US-00944493.
(ISIS-) ISIS PHARM INC.
Weinbach SP, Tillman LG, Geary RS, Hardee GE;
WPI; 2003-354422/33.
Pulsed release oral formulation providing enhanced gastrointestinal
absorption, comprises first particles containing drug and penetration
enhancer and second particles containing delayed release penetration
enhancer.
Disclosure; Page 28; 59pp; English.
The present invention describes a delayed release oral formulation (A),
giving enhanced gastrointestinal (GI) absorption of a drug (I). (A)
comprises a first set of particles containing (I) and a penetration
enhancer (II) and a second set of particles containing (II) in a delayed
release coating or matrix (III). (A) is used for enhancing the absorption
of (I) in mammals, especially humans. Typical disorders to be treated
include ulcerative colitis, rheumatoid arthritis, Crohn's disease,
inflammatory bowel disease and abnormal cellular proliferation. When the
particles release (I) and (II) at a first location in the GI tract
(generally the intestines), (II) is rapidly absorbed (during a first
release pulse) and is often present in insufficient amount to promote
absorption of the entire dose of (I). This problem is solved by providing
further (II) in delayed release form in the particles, so that absorption
of (I) is completed in a second pulse. The present sequence represents an
exemplary oligonucleotide from the present invention which inhibits HCMV
Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAAACG 149
Db 21 CGCAAGAAGAAGAGCAAAACG 2

RESULT 469
ACC68813/c
ID ACC68813 standard; DNA; 21 BP.
XX AC
XX ACC68813;
XX DT
XX 02-JUL-2003 (first entry)
XX DE
XX Human TGR23-2 PCR primer SEQ ID NO:9.
XX KW
XX G protein-coupled receptor; GPCR; TGR23-2; TGR23-1; TGR23; anorectic;
XX KW cytosstatic; obesity disorder; cancer; appetite stimulation; PCR primer;
XX KW ss.
XX OS
XX Homo sapiens.
XX Synthetic.
XX PN
XX WO2003025179-A1.
XX PD
XX 27-MAR-2003.
XX FT
XX 13-SEP-2002; 2002WO-JP009446.
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XX 14-SEP-2001; 2001JP-00279232.
XX 12-OCT-2001; 2001JP-00315148.
XX 10-APR-2002; 2002JP-00108621.
XX 10-JUN-2002; 2002JP-00169232.
XX (TAKE ) TAKEDA CHEM IND LTD.
XX
XX Mori M, Hayashi K, Miya H, Sato S, Kitada C, Matsumoto H;
XX Nagi T, Shimomura Y;
XX
XX WPI; 2003-313356/30.
XX
XX Polypeptides binding to G-protein coupled receptors TGR23-1 and TGR23-2
XX for prevention and treatment of obesity, cancer and appetite disorders.
XX
XX Example 2; Page 245; 338pp; Japanese.
XX
XX The present invention describes polypeptides (I) and their amides, esters
XX CC and salts which bind to the human G protein-coupled receptor (GPCR)
XX CC proteins TGR23-1 and TGR23-2. TGR23 proteins have anorectic and
XX CC cytosstatic activities. (I) can be used in the treatment, prevention and
XX CC diagnosis of obesity disorders and cancer (including cancer of the
XX CC prostate, colon, breast, lung (including non-small cell lung cancer),
XX CC testis, oesophagus, stomach, liver, pancreas, kidney, womb, ovary,
XX CC testis, bladder and brain, and blood cancers). (I) can also be used in
XX CC appetite stimulation. ACC68807 to ACC68890 and ABP97241 to ABP97280
XX CC represent sequences used in the exemplification of the present invention
XX
XX SQ Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 6e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0
XX
XX QY 396 TGAGGTGCAGTCTCCAGTGA 415
XX || ||| ||||| |||||
XX Db 21 TGCGGTGAAGTCTCCAGTGA 2
XX
XX RESULT 470
XX ACC68881/C
XX ID ACC68881 standard; DNA; 21 BP.
XX AC ACC68881;
XX
XX DT 02-JUL-2003 (first entry)
XX
XX DE Human GPCR TGR23-2 PCR primer SEQ ID NO:115.
XX
XX KW G protein-coupled receptor; GPCR; TGR23-2; TGR23-1; TGR23; anorectic;
XX KW cytosstatic; obesity disorder; cancer; appetite stimulation; PCR primer;
XX KW ss.
XX
XX OS Homo sapiens.
XX OS Synthetic.
XX
XX PN WO2003025179-A1.
XX
XX PD 27-MAR-2003.
XX
XX PF 13-SEP-2002; 2002WO-JP009446.
XX
XX PR 14-SEP-2001; 2001JP-00279232.
XX PR 12-OCT-2001; 2001JP-00315148.
XX PR 10-APR-2002; 2002JP-00108621.
XX PR 10-JUN-2002; 2002JP-00169232.
XX
XX PA (TAKE ) TAKEDA CHEM IND LTD.
XX
XX Mori M, Hayashi K, Miya H, Sato S, Kitada C, Matsumoto H;
XX PI Nagi T, Shimomura Y;
XX

```

CC variable domain (V κ pa) of the light chain. A protein of the invention
CC has immunosuppressive, antirheumatic, antiarthritic, antipsoriatic,
CC dermatological, antiinflammatory, cytostatic, virucide, and anti-HIV
CC activity. A mutant fragment of the invention is useful for treating and
CC preventing autoimmune diseases, specifically rheumatoid polyarthritis,
CC psoriasis or lupus erythematosus; immunological intolerance reaction,
CC especially where induced by transplantation or graft versus host disease;
CC cancers in which CD4 is implicated (especially CD4⁺ or Cesari lymphoma);
CC and immunodeficiency states associated with viral infection, especially
CC HIV. The present sequence is used in the exemplification of the
CC invention.
XX
XX Sequence 21 BP; 3 A; 5 C; 8 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1628 GCCCCAGGAGCGGCTG 1647
DB 21 GCCCCAGTAAAGCGGCTG 2
RESULT 472
ADI29043/C
ID ADI29043 standard; DNA; 21 BP.
XX
XX AC ADI29043;
XX
XX 22-APR-2004 (first entry)
XX
XX Oligonucleotide #3, used in phosphorus deprotection method.
DE
XX Deprotection; phosphorothioate; ss.
XX
XX Synthetic.
XX
XX WO2004009612-A1.
XX
XX 29-JAN-2004.
XX
XX PF 17-JUL-2003; 2003WO-US022211.
XX
XX 24-JUL-2002; 2002US-00201799.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ravikumar V;
XX
XX WPI; 2004-169187/16.
XX
XX Deprotection of phosphorus-protected oligonucleotide useful for the
XX preparation of pharmaceutical compound involves contacting the phosphorus
XX-protected oligonucleotide with non-malodorous deprotecting agent.
XX
XX Example 7; Page 39; 59pp; English.
XX
XX The present invention relates to a method for deprotection of phosphorus-
XX-protected oligonucleotides. The method involves contacting the phosphorus
XX-protected oligonucleotide with non-malodorous deprotecting agent to
XX remove the phosphorus protecting group (which is optionally substituted
XX alkyl). The method is useful for the preparation of phosphorus protected
XX oligonucleotides, which is useful for the preparation of pharmaceutical
XX compound. The present sequence is an oligonucleotide, used to illustrate
XX the method of the invention.
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAGATCAACG 149

Db 21 CGCAGAGAGAGCAACG 2
RESULT 473
ADJ97804
ID ADJ97804 standard; DNA; 21 BP.
XX
XX AC ADJ97804;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human Flk-1/KDR DNA sequence, a target for siRNA inhibition SeqID 577.
XX
XX human; ss; short interfering RNA; siRNA; angiogenesis;
XX vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1;
XX Flk-1/KDR; Kinase domain region; diabetic retinopathy;
XX age-related macular degeneration; inflammatory disease; psoriasis;
XX rheumatoid arthritis; cancer; breast; retinoblastoma; Wilms tumour;
XX lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;
XX antipsoriatic; antirheumatic; antiarthritic.
XX
XX Homo sapiens.
XX
XX WO2004009769-A2.
XX
XX 29-JAN-2004.
XX
XX PF 18-JUL-2003; 2003WO-US022444.
XX
XX 24-JUL-2002; 2002US-0398417P.
XX
XX 14-NOV-2002; 2002US-00294228.
XX
XX (UYPE-) UNIV PENNSYLVANIA.
XX
XX Tolentino MJ, Reich SJ;
XX WPI; 2004-203472/19.
XX
XX Novel short interfering RNA (siRNA) comprises sense and antisense RNA
XX strands, useful for inhibiting expression of human vascular endothelial
XX growth factor mRNA, for treating angiogenic disease, e.g. diabetic
XX retinopathy and cancer.
XX
XX Disclosure; SEQ ID NO 577; 218pp; English.
XX
XX This invention relates to novel compositions that comprise short
XX interfering RNA (siRNA) molecules, which can be used to inhibit
XX angiogenesis. Specifically, it refers to siRNAs that target and cause
XX RNAi-induced degradation of mRNA from human vascular endothelial growth
XX factor (VEGF), the VEGF receptor (Flt-1) and the Flk-1/KDR (kinase domain
XX region) genes, as well as mutants derived thereof. The present invention
XX describes sense and antisense RNA strands that form an RNA duplex and
XX bind to the target mRNA, such that expression is inhibited and the target
XX degraded. As such, siRNA administered in combination with a therapeutic
XX agent is useful for treating diseases associated with angiogenesis and
XX the overexpression of VEGF, which include diabetic retinopathy, age-
XX related macular degeneration, inflammatory disease, psoriasis and
XX rheumatoid arthritis. Furthermore, it can be used to treat various
XX cancers including breast, retinoblastoma, Wilms tumour and lymphoma.
XX Accordingly, these compositions exhibit cytostatic, antidiabetic,
XX ophthalmological, antiinflammatory, antipsoriatic, antirheumatic and
XX antiarthritic activities. This oligonucleotide is a human Flk-1/KDR DNA
XX oligo, a target for siRNA inhibition of the invention.
XX
XX Sequence 21 BP; 10 A; 7 C; 3 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 974 ACCGAGACCTCAAGCCCGAG 993

```
Db      2 ACCGAGACCTAAACCCAG 21
RESULT 474
ADK69873/c
ID      ADK69873 standard; DNA; 21 BP.
XX
XX      AC      ADK69873;
XX
XX      DT      06-MAY-2004 (first entry)
XX
XX      DE      Sulphurised oligonucleotide #3.
XX
XX      KW      Phosphorothioate backbone; sulphurised oligonucleotide; ss.
XX
XX      OS      Unidentified.
XX
XX      FH      Key      Location/Qualifiers
XX      modified_base 1..21
XX      FT      /tag= a
XX      FT      /mod_base= OTHER
XX      FT      /note= "Phosphorothioate backbone"
XX
XX      misc_RNA
XX      FT      1..7
XX      FT      /tag= a
XX      FT      /label= RNA
XX      FT      /note= "2'-methoxyethyl residues"
XX      FT      15..21
XX      FT      /tag= c
XX      FT      /label= RNA
XX
XX      US2003212267-A1.
XX
XX      13-NOV-2003.
XX
XX      12-DEC-2002; 2002US-00181200.
XX
XX      11-JAN-2000; 2000US-00481486.
XX      PR      10-JAN-2001; 2001WO-US000715.
XX
XX      (COLE/) COLE D L.
XX      PA      (RAVI/) RAVIKUMAR V T.
XX      PA      (CHER/) CHERUVALLATH Z S.
XX
XX      Cole DL, Ravikumar VT, Cheruvallath ZS;
XX      WPI; 2004-069376/07.
XX
XX      Preparation of phosphorothioate oligonucleotides involves oxidizing
XX      phosphite intermediate with acetyl disulfide in acetonitrile for time to
XX      effect conversion of phosphite intermediate to phosphorothioate.
XX
XX      Example 5; SEQ ID NO 3; 8pp; English.
XX
XX      The invention relates to phosphorothioate oligonucleotides having
XX      nucleoside with 240 modification are prepared by phosphorylating 5'-
XX      hydroxyl of a nucleic acid moiety having a nucleoside with 2'
XX      modification in an acetonitrile containing solvent mixture to form a
XX      phosphite intermediate; and oxidizing the phosphite intermediate with an
XX      acetyl disulfide in an acetonitrile for a time to effect conversion of
XX      the phosphite intermediate to phosphorothioate. The invented method
XX      achieves high yields and greater efficiency. The present sequence is
XX      sulphurised oligonucleotide used in the exemplification of the invention.
XX
XX      Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX      Query Match      0.9%; Score 15.2; DB 1; Length 21;
XX      Best Local Similarity 85.0%; Pred. No. 6e+02;
XX      Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX      QY      130 CGGATGAGAGATCAACG 149
XX      ||| ||||| ||||| |||||
XX      Db      21 CGCAAGAAGAAGACAAACG 2
XX
XX      RESULT 475
XX      ADK69877/c
XX      ID      ADK69877 standard; DNA; 21 BP.
XX
XX      AC      ADK69877;
XX
XX      DT      20-MAY-2004 (first entry)
```

```
DT      06-MAY-2004 (first entry)
XX
XX      DE      Sulphurised oligonucleotide #7 (RNA-DNA hybrid).
XX
XX      KW      Phosphorothioate backbone; sulphurised oligonucleotide; RNA-DNA hybrid;
XX      ss.
XX
XX      OS      Unidentified.
XX
XX      FH      Key      Location/Qualifiers
XX      modified_base 1..21
XX      FT      /tag= b
XX      FT      /mod_base= OTHER
XX      FT      /note= "Phosphorothioate backbone"
XX
XX      misc_RNA
XX      FT      1..7
XX      FT      /tag= a
XX      FT      /label= RNA
XX      FT      /note= "2'-methoxyethyl residues"
XX      FT      15..21
XX      FT      /tag= c
XX      FT      /label= RNA
XX
XX      US2003212267-A1.
XX
XX      13-NOV-2003.
XX
XX      12-DEC-2002; 2002US-00181200.
XX
XX      11-JAN-2000; 2000US-00481486.
XX      PR      10-JAN-2001; 2001WO-US000715.
XX
XX      (COLE/) COLE D L.
XX      PA      (RAVI/) RAVIKUMAR V T.
XX      PA      (CHER/) CHERUVALLATH Z S.
XX
XX      Cole DL, Ravikumar VT, Cheruvallath ZS;
XX      WPI; 2004-069376/07.
XX
XX      Preparation of phosphorothioate oligonucleotides involves oxidizing
XX      phosphite intermediate with acetyl disulfide in acetonitrile for time to
XX      effect conversion of phosphite intermediate to phosphorothioate.
XX
XX      Example 9; SEQ ID NO 7; 8pp; English.
XX
XX      The invention relates to phosphorothioate oligonucleotides having
XX      nucleoside with 240 modification are prepared by phosphorylating 5'-
XX      hydroxyl of a nucleic acid moiety having a nucleoside with 2'
XX      modification in an acetonitrile containing solvent mixture to form a
XX      phosphite intermediate; and oxidizing the phosphite intermediate with an
XX      acetyl disulfide in an acetonitrile for a time to effect conversion of
XX      the phosphite intermediate to phosphorothioate. The invented method
XX      achieves high yields and greater efficiency. The present sequence is
XX      sulphurised oligonucleotide used in the exemplification of the invention.
XX
XX      Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
XX
XX      Query Match      0.9%; Score 15.2; DB 1; Length 21;
XX      Best Local Similarity 85.0%; Pred. No. 6e+02;
XX      Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX      QY      130 CGGATGAGAGATCAACG 149
XX      ||| ||||| ||||| |||||
XX      Db      21 CGCAAGAAGAAGACAAACG 2
XX
XX      RESULT 476
XX      ADJ79632/c
XX      ID      ADJ79632 standard; DNA; 21 BP.
XX
XX      AC      ADJ79632;
XX
XX      DT      20-MAY-2004 (first entry)
```

XX Phosphorothioate oligonucleotide.
DE Alpha-herpesviridae; beta-herpesviridae; gamma-herpesviridae;
XX arynaphthalene; herpesvirus; virus growth inhibition;
KW phosphorothioate oligonucleotide; virucide; ss.
XX Unidentified.
XX OS
XX US2004044069-A1.
XX PD
XX 04-MAR-2004.
XX PF
XX 23-MAY-2003; 2003US-00445268.
XX PR
XX 23-MAY-2002; 2002US-0382692P.
XX PA
XX (HSUT//) HSU T.
XX (HSIE//) HSIEH H.
XX (JUAN//) JUAN L.
XX (CHAN//) CHANG S.
XX (KUO//) KUO Y.
XX PI Hsu T, Hsieh H, Juan L, Chang S, Kuo Y;
XX WPI; 2004-256788/24.
XX DR
XX XX
XX Use of arynaphthalene compound for treating infection by herpesvirus
PT e.g. alpha herpesvirinae, beta herpesvirinae and gamma herpesvirinae.
XX PT
XX Disclosure; Page 3; 10pp; English.
XX CC
XX The invention relates to a method for treatment of infection by alpha-
CC herpesviridae, beta-herpesviridae or gamma-herpesviridae involving
CC administration of an arynaphthalene compound. The method is used for
CC treating infection by beta-herpesviridae (preferably herpesvirus 5, 6 or
CC 7), gamma-herpesviridae (preferably herpesvirus 4 or 8) and alpha-
CC herpesviridae (preferably herpesvirus 1, 2 or 3). The arynaphthalene
CC compound inhibits virus growth. This sequence represents a
CC phosphorothioate oligonucleotide used to treat herpesviridae infection.
XX CC
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAAGAAGACAAACG 2
RESULT 477
ADM94652
ID ADM94652 standard; DNA; 21 BP.
XX AC
XX ADM94652;
XX DT
XX 01-JUL-2004 (first entry)
XX DE
XX Human heat shock protein 27 antisense oligonucleotide SEQ ID NO:2.
XX KW
XX heat shock protein 27; hsp27; cytostatic; gene therapy;
XX KW heat shock protein 27 inhibitor; hsp27 inhibitor; cancer; human;
XX KW antisense oligonucleotide; ss.
XX OS
XX Homo sapiens.
XX OS Synthetic.
XX PN WO2004030660-A2.
XX PD
XX 15-APR-2004.
XX PF
XX 02-OCT-2003; 2003WO-CA001588.
XX PR
XX 02-OCT-2002; 2002US-0415859P.
XX PR 18-APR-2003; 2003US-0463952P.
XX XX
XX (UYBR-) UNIV BRITISH COLUMBIA.
XX XX
XX Gleave ME, Rocchi P, Signaevsky M;
XX WPI; 2004-316331/29.
XX DR
XX New composition comprising a therapeutic agent that reduces the amount of
PT active hsp27 in hsp27 expressing cells exposed to the therapeutic agent,
PT useful in treating cancer, e.g., prostate cancer or a central nervous
PT system malignancy.
XX XX
XX Claim 5; SEQ ID NO 2; 38pp; English.
XX CC
XX The present invention describes a composition which comprises a
CC therapeutic agent that reduces the amount of active heat shock protein 27
CC (hsp27) in hsp27 expressing cells exposed to the therapeutic agent. The
CC composition has cytostatic activity, and can be used in gene therapy. The
CC composition is useful in treating cancer, e.g., prostate, bladder, lung,
CC breast, pancreatic, colon, skin (for example melanoma), renal or ovarian
CC cancer or a central nervous system malignancy. The present sequence
CC represents a human hsp27 antisense oligonucleotide which is used in the
CC exemplification of the present invention.
XX CC
XX Sequence 21 BP; 2 A; 6 C; 7 G; 6 T; 0 U; 0 Other;
SQ Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1020 GCTCAAGCTGGCTGACTTTG 1039
Db 1 GGTCATGCTGGCTGACTCTG 20
RESULT 478
ADO20547/c
ID ADO20547 standard; DNA; 21 BP.
XX AC
XX ADO20547;
XX DT
XX 01-JUL-2004 (first entry)
XX XX
XX 21mer antisense against CMV.
XX DE
XX Virucide; cytostatic; gene therapy; antiviral oligonucleotide;
XX KW prion disease; cancer; oncovirus; ss.
XX XX
XX Cytomegalovirus.
XX XX
XX WO2004024919-A1.
XX XX
XX 25-MAR-2004.
XX XX
XX 11-SEP-2003; 2003WO-IB004573.
XX XX
XX 13-SEP-2002; 2002US-0410264P.
XX PR 05-DEC-2002; 2002US-0430934P.
XX XX
XX (REPL-) REPLICOR INC.
XX XX
XX Vaillant A, Juteau J;
XX PI WPI; 2004-270045/25.
XX DR
XX Formulation useful for treating, controlling or preventing prion disease
PT or for prophylactic treatment of cancer caused by oncoviruses, comprises
PT an antiviral oligonucleotide.
XX XX

PS Example 1; Page 103; 161pp; English.

XX The invention relates to an antiviral oligonucleotide formulation

CC comprising an antiviral oligonucleotide, where the antiviral activity of

CC the oligonucleotide occurs principally by a non-sequence complementary

CC mode of action. Further disclosed is a kit comprising at least one

CC antiviral oligonucleotide or antiviral oligonucleotide formulation in a

CC labelled package, where the label on the package indicates that the

CC antiviral oligonucleotide can be used against at least one virus, and a

CC method for the prophylactic treatment of cancer caused by oncoviruses in

CC human or non-human animal. The formulations and antiviral pharmaceutical

CC composition are useful in the treatment, control, or prevention of a

CC disease with a viral etiology, preferably a prion disease. They are also

CC useful for the prophylactic treatment of cancer caused by oncoviruses in

CC a human or a non-human animal, or viral infections. The current sequence

CC represents an oligonucleotide used in an example from the invention.

XX

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 6e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGATGACGAGATCAACG 149

DB 21 CGCAAGAGAGAGCAACG 2

RESULT 479

ADQ58895/c

ID ADQ58895 standard; DNA; 21 BP.

XX

AC ADQ58895;

XX

DT 23-SEP-2004 (first entry)

XX

DE Yin yang-1 (YX-1) associated primer #3.

XX

KW antidiabetic; immunosuppressive; cytostatic; Yin Yang-1;

KW transcription factor; type 1 diabetes; transgenic; diabetes;

KW multifunctional transcription factor; type 2 diabetes;

KW autoimmune disease; cancer; mineral metabolism disorder;

KW lipid metabolism disorder; rat; YX-1; PCR; primer; ss.

XX

OS Rattus norvegicus.

XX

PN WO2004056857-A2.

XX

PD 08-JUL-2004.

XX

PF 19-DEC-2003; 2003WO-EP014762.

XX

PR 20-DEC-2002; 2002DE-01061650.

XX

PA (UYGR) UNIV GREIFSWALD.

XX

PI Kloeting I, Kloeting N;

XX

DR WPI; 2004-507695/48.

XX

PT New variant of the Yin Yang-1 transcription factor, useful for treating

PT e.g. diabetes and autoimmune disease, also for diagnosing predisposition

PT and in screening for therapeutic agents.

XX

PS Disclosure; Fig 11; 193pp; German.

XX

CC The invention describes a protein variant of the Yin Yang-1 transcription

CC factor (I), having a 411 amino acid (aa) sequence (4) reproduced. Also

CC described are: protein (Ia) that is a homologue of (4) and includes Arg a

CC position 303 and Lys at position 311; peptide (II) that is a fragment of

CC (I) or (Ia) and includes the positions 303 and 311 of (4); nucleic acid

CC (III) that encodes (I), (Ia) or (II); an antibody (Ab) directed against

CC (I) or (Ia); methods for determining a tendency to develop type 1

CC diabetes; transgenic non-human mammal (A) in which the germ and somatic

CC cells contain a nucleic acid (or segment) encoding a 411 aa sequence (2),

CC or sequences with at least 95, best 98% homology, where the homologue

CC includes 303Met and 311Arg; and use of (A) to screen for compounds (B)

CC that are protective against diabetes. The methods are useful for

CC modulating activity of the YX1 (Yin Yang-1) multifunctional transcription

CC factor. (I), or its homologues and peptides, also nucleic acids encoding

CC them and antisense oligonucleotides, are useful for treatment of type 1

CC and 2 diabetes, autoimmune diseases, cancer and disorders of mineral and

CC lipid metabolism. Detecting mutations in the human analogue of (4) is

CC used to determine a predisposition for these diseases. Transgenic animals

CC that contain the sequence encoding (4), or its homologues, are used to

CC screen for agents protective against diabetes. This sequence represents a

CC primer associated with the isolation and analysis of yin yang-1

CC transcription factor.

XX

SQ Sequence 21 BP; 0 A; 11 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 6e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 24 AGCAATGCAGAGTAGGCAG 43

DB 20 AGCAAGGCAGAGCGGAAG 1

RESULT 480

AAQ43226

ID AAQ43226 standard; DNA; 22 BP.

XX

AC AAQ43226;

XX

DT 25-MAR-2003 (revised)

DT 13-OCT-1993 (first entry)

XX

DE B-B10 V region primer Vhback #1.

XX

KW Complementarity-determining region; CDR; humanised; antibody; hIL2R;

KW human; interleukin; IL-2; receptor; murine; anti-human; Ab; T-cell;

KW monoclonal antibody; B-B10; mixed lymphocyte reaction; variable; V;

KW region; PCR; framework; plasmid; heavy; H; light; L; amplify; primer;

KW polymerase chain reaction; ss.

XX

OS Synthetic.

XX

PN WO9311238-A1.

XX

PD 10-JUN-1993.

XX

PF 03-DEC-1992; 92WO-JP001583.

XX

PR 06-DEC-1991; 91JP-00323319.

XX

PA (SUMU) SUMITOMO PHARM CO LTD.

PA (BIOT) BIOTEST PHARMA GMBH.

PA (INNO-) INNOTHERAPIE LAB.

XX

PI Nakatani T, Gomi H, Wijdenes J, Noguchi H;

XX

DR WPI; 1993-197057/24.

XX

PT Humanised antibody comprising - CDR region of mouse MAB B-B10 specific

PT for IL-2 receptor useful for treating carcinoma expressing IL-2 receptor.

XX

PS Disclosure; Page 44; 62pp; English.

XX

CC The sequences given in AAQ43226-32 are primers which were used in the

CC cloning of DNA encoding the variable (V) regions of the murine anti-

CC human IL-2 receptor monoclonal Ab (MAB) B-B10. This MAB was used in the

CC construction of a humanised antibody (Ab) which binds specifically to

CC human interleukin (IL)-2 receptor (hIL2R). The complementarity-

CC determining regions (CDRs) for the hIL2R MAB were derived from B-B10 (see

CC also AAR37599-04). The hIL2R Mab is antagonistic to the binding of IL-2
 CC to the IL-2 receptor on human T-cells. It also inhibits the human mixed
 CC lymphocyte reaction. The cDNA encoding the variable (V) region of the B-
 CC B10 Ab was cloned by PCR and sequenced (see also AAQ43233-36) A human Ab
 CC with high levels of amino acid sequence homology to the murine sequence
 CC was selected and the framework of this Ab was bound with the B-B10 V
 CC region CDR and a part of the framework to design several kinds of the
 CC humanised B-B10 V region. The DNA sequence coding this humanised B-B10
 CC was synthesised and a plasmid expressing humanised B-B10 was constructed.
 CC (Updated on 25-MAR-2003 to correct PN field.)
 CC
 CC
 SQ Sequence 22 BP; 7 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;
 Best Local Similarity 85.0%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 140 AGATCAAAACGGCAGCTGTCA 159
 |||||
 Db 1 AGGTCAAACTGCAGCAGTCA 20

RESULT 481
 AAQ85817/c
 ID AAQ85817 standard; DNA; 22 BP.

XX AC AAQ85817;

XX 25-MAR-2003 (revised)
 DT 07-NOV-1995 (first entry)

DE Anti-CMV 2'-O-alkylamino-containing oligomer #70.

XX Alkylamino group; ribofuranosyl sugar; antisense therapy; virus; HIV;
 KW herpes; papilloma; antiviral; ss.

XX Synthetic.

XX Key Location/Qualifiers
 FH misc_feature 1..22

FT /*tag= b
 FT /note= "contains phosphorothioate linkages between
 FT nucleosides"

FT modified_base 1

FT /*tag= a
 FT /mod base= OTHER
 FT /note= "2'-O-[hexyl-N-(3-oxycarbonyl-cholesteryl)amino]-
 FT uridine or may be 5'-O-dimethoxytrityl-2'-O-[hexyl-N-(5-
 FT thiocarbonyl-3,6-dipivoyl fluorescein)amino]uridine"

XX WO9506659-A1.

XX 09-MAR-1995.

XX 02-SEP-1994; 94WO-US010131.

XX 03-SEP-1993; 93US-00117363.

XX (ISIS-) ISIS PHARM INC.

XX Cook PD, Manoharan M, Guinasso CJ;

XX WPI; 1995-115397/15.

XX New amine-derivatised nucleoside(s) and oligo:nucleoside(s) - useful as
 XX diagnostics, therapeutics and research reagents, partic. in anti-sense
 XX therapy.

XX Example 43-44; Page 56; 117pp; English.

XX Oligomers AAQ85816-21 are generated to contain a 2'-O-alkylamino-modified
 CC nucleoside containing either a cholesterol or fluorescein functional
 CC group. This sequence is an analogue of an antisense sequence to a

CC cytomegalovirus (CMV) sequence. The modified nucleosides may increase the
 CC half-life of the oligomers in cell extract assays for the inhibition of
 CC specific target sequences. The modified oligomer is an example of a
 CC compound (see AAQ85799-Q85839 for other examples) e.g. a nucleoside or
 CC oligonucleoside, which contains a ribofuranosyl sugar portion and a base
 CC portion, such that at least one of the nucleoside contains at a 2'-O-, 3'-
 CC -O- or 5'-O-position, a substitution (see AAQ85799 for details of the
 CC substitutions). The compounds are useful in diagnostics, therapeutics and
 CC as research reagents particularly in antisense therapy for killing cells
 CC and viruses such as HIV, herpes or papilloma viruses. (Updated on 25-MAR-
 CC 2003 to correct PN field.)
 CC
 XX
 SQ Sequence 22 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 1 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;

Best Local Similarity 85.0%; Pred. No. 6.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAAACG 149
 |||||
 Db 22 CGCAAGAAGAAGACAAACG 3

RESULT 482

AAT98198/c

ID AAT98198 standard; DNA; 22 BP.

XX AC AAT98198;

XX 25-MAR-1998 (first entry)

DE Oligonucleotide for murine Ig CH4 domain.

XX Sea firefly; Vargula; luciferase; label; mouse; immunoglobulin; murine;
 KW constant heavy domain; epidermal growth factor receptor; fusion protein;
 KW luminescent enzyme; ss.

XX Synthetic.

XX Mus sp.

XX JP09056384-A.

XX 04-MAR-1997.

XX 25-AUG-1995; 95JP-00216911.

XX 25-AUG-1995; 95JP-00216911.

XX (TORA) TORAY IND INC.

XX WPI; 1997-492889/46.

XX A method of labelling cells - comprising a luminescent protein fused to a
 XX trans-membrane receptor.

XX Example 3; Page 3; 9pp; Japanese.

XX This oligonucleotide was used to generate a fusion protein in which the
 XX sea firefly (Vargula sp.) luciferase is linked to an epidermal growth
 XX factor receptor, via a mouse immunoglobulin (Ig) constant heavy domain 4
 XX (CH4) chain. This oligonucleotide was used to construct the CH4 linker.
 XX This is an example of a method of detectably labelling cells by fusing a
 XX secretory-type luminescent enzyme with a cell membrane protein and
 XX expressing the fusion protein on the cell membrane

XX Sequence 22 BP; 8 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;

Best Local Similarity 85.0%; Pred. No. 6.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1726 GTTACCTGCCCACTGTCC 1745
 |||||

Db	20 GTTACCTGCGACTTGTC 1	Db	22 ATCTTCAGAGGATGCCAT 3
RESULT 483		RESULT 484	
AAS10876/c		ABS59071/c	
ID AAS10876 standard; DNA; 22 BP.		ID ABS59071 standard; DNA; 22 BP.	
XX AAS10876;		XX ABS59071;	
XX 24-OCT-2001 (first entry)		XX 05-NOV-2002 (first entry)	
XX Human NOV2 RTQ PCR forward primer.		XX Human G-protein coupled receptor, reverse primer #73.	
XX Human; NOV2; ss; fertility disorder; spermatogenesis; cardiant;		XX Human; G-protein coupled receptor; GPCR; cardiomyopathy; atherosclerosis;	
KW cytostatic; immunomodulatory; antiproliferative; antidiabetic;		KW diabetes; cell signal processing; metabolic pathway modulation; cancer;	
KW cell proliferation; cancer; diabetic retinopathy; angiogenic disorder;		KW adenocarcinoma; lymphoma; prostate cancer; uterus cancer; asthma;	
KW pulmonary disorder; haematopoietic disorder; immunological disorder;		KW immune response; neurodegenerative disorder; inflammatory disorder;	
KW inflammatory disorder; tumour related disorders; emphysema; cirrhosis;		KW Crohn's disease; multiple sclerosis; Albright hereditary osteodystrophy;	
KW wound healing; gene therapy; RTQ PCR primer; Real-time quantitative PCR.		KW primer; PCR; ss.	
XX Homo sapiens.		XX Homo sapiens.	
OS Synthetic.		OS Homo sapiens.	
XX WO200149729-A2.		XX WO200259313-A2.	
PN 12-JUL-2001.		PN 01-AUG-2002.	
XX 05-JAN-2001; 2001WO-US000299.		XX 18-DEC-2001; 2001WO-US049394.	
XX 06-JAN-2000; 2000US-0174724P.		XX 18-DEC-2000; 2000US-0256635P.	
PR 11-JAN-2000; 2000US-0175434P.		PR 21-DEC-2000; 2000US-0257876P.	
PR 11-JAN-2000; 2000US-0175488P.		PR 04-JAN-2001; 2001US-0259743P.	
PR 12-JAN-2000; 2000US-0175696P.		PR 10-JAN-2001; 2001US-0260718P.	
PR 12-JAN-2000; 2000US-0175743P.		PR 12-JAN-2001; 2001US-0261498P.	
PR 13-JAN-2000; 2000US-0175819P.		PR 24-JAN-2001; 2001US-0263689P.	
PR 07-AUG-2000; 2000US-0223524P.		PR 08-FEB-2001; 2001US-0267464P.	
PR 04-JAN-2001; 2001US-00755665.		PR 22-FEB-2001; 2001US-0271021P.	
XX (CURA-) CURAGEN CORP.		PR 14-MAR-2001; 2001US-0275946P.	
XX Prayaga SK, Majumder K, Taillon BE, Spaderna SK, Spytek KA;		PR 23-MAR-2001; 2001US-0278150P.	
PI Macdougall J;		PR 18-APR-2001; 2001US-0284591P.	
XX WPI; 2001-418356/44.		PR 23-APR-2001; 2001US-0285718P.	
XX Nucleic acids encoding polypeptides, designated NOVX polypeptides, useful		PR 19-JUN-2001; 2001US-0299327P.	
PT for treating a syndrome associated with a NOVX-associated disorder, e.g.		PR 16-AUG-2001; 2001US-0312902P.	
PT cell proliferation (e.g. cancer and diabetic retinopathy), angiogenic or		XX (CURA-) CURAGEN CORP.	
XX pulmonary disorder.		XX Li L, Ballinger RA, Padigaru M, Kekuda R, Colman SD, Spytek KA;	
XX Example 1; Page 120; 144pp; English.		XX Casman SJ, Vernet CAM, Shenoy SG, Gusev V, Malyankar UM, Edinger S;	
XX The invention relates to nucleic acids encoding NOVX (X being an integer		XX Gerlach V, Smithson G, Stone DJ, Sciore P, Macdougall JR, Gunther E;	
CC from 1-8) polypeptides. The NOVX nucleic acids and polypeptides are		XX Peyman JA, Ellerman K, Gangolli EA, Millet I;	
CC useful in diagnosing, treating or manufacturing a medicament for a		XX WPI; 2002-599789/54.	
CC disease or disorder associated with NOVX e.g. cell proliferation (cancer		XX New G protein coupled receptor polypeptides and polynucleotides, useful	
CC and diabetic retinopathy), angiogenic or pulmonary disorders, fertility		PT in gene therapy, particularly for treating or preventing cardiomyopathy,	
CC disorders (e.g. of spermatogenesis), haematopoietic, immunological,		PT atherosclerosis, diabetes, multiple sclerosis, Crohn's disease or cancer	
CC inflammatory and tumour related disorders, emphysema, cirrhosis, wound		PT in humans.	
CC healing. NOVX nucleic acids are also useful in gene therapy. They are		PS Claim 1; Page 450; 685pp; English.	
CC also used for screening for a modulator of activity or of latency or		XX The invention relates to novel isolated G-protein coupled receptor (GPCR)	
CC predisposition to a NOVX-associated disorder. They are also useful for		CC polypeptides and polynucleotides. The GPCR polypeptide, GPCR nucleic acid	
CC determining the presence of or predisposition to a NOVX-associated		CC and antibody are useful for treating, preventing or alleviating a GPCR-	
CC disorder. The present sequence is an RTQ PCR primer (real-time		CC associated disorder or a pathological state in a subject, particularly a	
CC quantitative PCR) for amplifying nucleic acids encoding human NOV2		CC human. In particular, the disorder is cardiomyopathy, atherosclerosis,	
XX Sequence 22 BP; 6 A; 5 C; 5 G; 6 T; 0 U; 0 Other;		CC diabetes, or a disorder related to cell signal processing and metabolic	
XX Query Match 0.9%; Score 15.2; DB 1; Length 22;		CC pathway modulation. The GPCR polypeptide and nucleic acid are also useful	
XX Best Local Similarity 85.0%; Pred. No. 6.3e+02;		CC for diagnosing the presence of or predisposition to a disease associated	
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;		CC with altered levels of GPCR, particularly cancer. The GPCR nucleic acid	
XX 1426 ATCTCGCAGAGGATGCCAT 1445		CC and polypeptide are especially useful in therapeutic or prophylactic	
		CC applications for disorders associated with aberrant GPCR expression or	
		CC activity. The DNA encoding the protein is useful in gene therapy for	
		CC treating the above conditions. Furthermore, the nucleic acids and	

CC polypeptides are useful in treating adenocarcinoma, lymphoma, prostate
 CC cancer, uterus cancer, immune response, neurodegenerative disorders,
 CC asthma, inflammatory disorders, Crohn's disease, multiple sclerosis or
 CC Albritght hereditary osteodystrophy. These are also useful in developing a
 CC powerful assay system for functional analysis of various human disorders,
 CC as well as in diagnostic applications. AB558747-ABS59231 represent human
 CC GPCR coding sequences, primers and probes of the invention
 XX
 SQ Sequence 22 BP; 10 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15.2; DB 1; Length 22;
 Best Local Similarity 85.0%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 917 TGTTCTGTTCCAGCTGCTC 936
 Db 22 TCTTCTGTTCCGCTGATC 3
 RESULT 485
 ABV99538/c
 ID ABV99538 standard; DNA; 22 BP.
 XX
 AC ABV99538;
 XX
 DT 27-JAN-2003 (first entry)
 XX
 DE Human NOV31 reverse PCR primer Ag3530.
 XX
 KW Human; anti-HIV; cytostatic; antidiabetic; antiasthmatic; cachexia; AIDS;
 KW antiinflammatory; cardiant; haemostatic; neuroprotective; anorectic;
 KW neotropic; immunosuppressive; osteopathic; antiparkinsonian; cancer;
 KW antifertility; cerebroprotective; gene therapy; NOVX; NOV; fertility;
 KW metabolic disorder; diabetes; obesity; infectious disease; anorexia;
 KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
 KW immune disorder; haematopoietic disorder; cardiovascular disorder;
 KW bronchial asthma; dyslipidemia; metabolic disturbance; neurogenesis; PCR;
 KW metabolic syndrome X; wasting disorder; cell differentiation; primer;
 KW cell proliferation; haematopoiesis; wound healing; angiogenesis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200272771-A2.
 XX
 PD 19-SEP-2002.
 XX
 PF 08-MAR-2002; 2002WO-US007288.
 XX
 PR 08-MAR-2001; 2001US-0274101P.
 PR 08-MAR-2001; 2001US-0274194P.
 PR 08-MAR-2001; 2001US-0274281P.
 PR 08-MAR-2001; 2001US-0274322P.
 PR 09-MAR-2001; 2001US-0274849P.
 PR 12-MAR-2001; 2001US-0275235P.
 PR 13-MAR-2001; 2001US-0275578P.
 PR 13-MAR-2001; 2001US-0275579P.
 PR 13-MAR-2001; 2001US-0275601P.
 PR 14-MAR-2001; 2001US-0276000P.
 PR 16-MAR-2001; 2001US-0276776P.
 PR 19-MAR-2001; 2001US-0276994P.
 PR 20-MAR-2001; 2001US-0277239P.
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 PR 20-MAR-2001; 2001US-0277327P.
 PR 20-MAR-2001; 2001US-0277338P.
 PR 21-MAR-2001; 2001US-0277791P.
 PR 22-MAR-2001; 2001US-0277833P.
 PR 23-MAR-2001; 2001US-0278152P.
 PR 26-MAR-2001; 2001US-0278894P.
 PR 27-MAR-2001; 2001US-0278999P.
 PR 28-MAR-2001; 2001US-0279036P.
 PR 28-MAR-2001; 2001US-0279344P.
 PR 30-MAR-2001; 2001US-0279995P.
 PR 30-MAR-2001; 2001US-0280233P.

PR 02-APR-2001; 2001US-0280802P.
 PR 02-APR-2001; 2001US-0280822P.
 PR 02-APR-2001; 2001US-0280900P.
 PR 04-APR-2001; 2001US-0281194P.
 PR 13-APR-2001; 2001US-0283675P.
 PR 30-APR-2001; 2001US-0287424P.
 PR 02-MAY-2001; 2001US-0288066P.
 PR 03-MAY-2001; 2001US-0288342P.
 PR 03-MAY-2001; 2001US-0288528P.
 PR 15-MAY-2001; 2001US-0291190P.
 PR 16-MAY-2001; 2001US-0291099P.
 PR 16-MAY-2001; 2001US-0291240P.
 PR 30-MAY-2001; 2001US-0294485P.
 PR 31-MAY-2001; 2001US-0294889P.
 PR 31-MAY-2001; 2001US-0294899P.
 PR 18-JUN-2001; 2001US-0299027P.
 PR 19-JUN-2001; 2001US-0299303P.
 PR 19-JUN-2001; 2001US-0299310P.
 PR 10-JUL-2001; 2001US-0304354P.
 PR 31-JUL-2001; 2001US-0309198P.
 PR 16-AUG-2001; 2001US-0312903P.
 PR 10-SEP-2001; 2001US-0318462P.
 PR 12-SEP-2001; 2001US-0318770P.
 PR 27-SEP-2001; 2001US-0325430P.
 PR 27-SEP-2001; 2001US-0325681P.
 PR 18-OCT-2001; 2001US-0330380P.
 PR 31-OCT-2001; 2001US-0335301P.
 PR 14-NOV-2001; 2001US-0332172P.
 PR 14-NOV-2001; 2001US-0332271P.
 PR 14-NOV-2001; 2001US-0332272P.
 PR 14-NOV-2001; 2001US-0333184P.
 PR 21-NOV-2001; 2001US-0333272P.
 PR 21-NOV-2001; 2001US-0332094P.
 PR 03-DEC-2001; 2001US-0337426P.
 PR 03-DEC-2001; 2001US-0338092P.
 PR 04-DEC-2001; 2001US-0337185P.
 PR 03-JAN-2002; 2002US-0345705P.
 PR 08-MAR-2002; 2002US-00093463.
 XX
 PA (CURA-) CURAGEN CORP.
 XX
 PI Rastelli L, Mezes PD, Smithson G, Guo X, Gerlach V, Casman SJ;
 PI Boldog FL, Li L, Zerkusen BD, Tchernev VT, Gangolli EA, Vernet CAM;
 PI Pena CE, Burgess CE, Liu X, Spytek KA, Gorman L, Spaderina SK;
 PI Voss EZ, Malvankar UM, Anderson DW, Patturajan M, Miller CB;
 PI Taupier RJ, Padigaru M, Shenoy SG, Kekuda R, Gusev VY, Pochart PF;
 PI Zhong M;
 XX
 WPI; 2002-732824/79.
 XX
 PT New NOVX polypeptides and polynucleotides, useful for preventing,
 PT diagnosing or treating NOVX-associated disorders e.g. diabetes, cancer,
 PT Alzheimer's disease, dyslipidemias, obesity, immune or hematopoietic
 PT disorders, and asthma.
 XX
 PS Example C; Page 505; 619pp; English.
 XX
 CC The present invention relates to new isolated proteins (NOVX) and their
 CC coding sequences (ABV99327-ABV99595 and ABP70049-ABP70149), where X is
 CC any number from 1 to 48. The NOVX proteins and coding sequences are
 CC useful in the manufacture of a medicament for treating a syndrome
 CC associated with a human disease, preferably a NOVX-associated disorder.
 CC The NOVX coding sequences and proteins are useful for treating,
 CC preventing or diagnosing diseases such as metabolic disorders, diabetes,
 CC obesity, infectious disease, anorexia, cancer-associated cachexia,
 CC cancer, neurodegenerative diseases, Alzheimer's disease, Parkinson's
 CC disease, immune disorders, haematopoietic disorders, cardiovascular
 CC disorders, fertility, bronchial asthma, AIDS, dyslipidemia, metabolic
 CC disturbances associated with obesity, metabolic syndrome X or wasting
 CC disorders associated with chronic diseases or various cancers. The NOVX
 CC coding sequences and proteins may also be used as targets for the
 CC identification of small molecules that modulate or inhibit e.g.
 CC neurogenesis, cell differentiation, cell proliferation, haematopoiesis,

CC wound healing and angiogenesis, in gene therapy, in generation of
 CC antibodies that bind immunospecifically to NOVX substances for use in
 CC therapeutic or diagnostic methods. The present sequence is a PCR primer,
 CC which was used in an example from the invention

XX SQ Sequence 22 BP; 2 A; 6 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;
 Best Local Similarity 85.0%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1531 CTACAAAGGAGCCAGCCT 1550
 ||||| ||||| ||||| |||||
 Db 22 CTACAAAGGAGGACAGACT 3

RESULT 486
 ABK95214

ID ABK95214 standard; DNA; 22 BP.

XX AC ABK95214;

DT 24-SEP-2002 (first entry)

DE PCR primer containing part of c-jun and 6 repeated His-tags.

XX C-terminal modified protein; protein interaction detection;

KW proteome analysis; protein-nucleic acid interaction; PCR; primer; ss.

XX Synthetic.

OS WO200246395-A1.

XX 13-JUN-2002.

XX 07-DEC-2001; 2001WO-JP010731.

XX 07-DEC-2000; 2000JP-00373105.

XX (UYKE-) UNIV KEIO.

XX Yanagawa H, Doi N, Miyamoto E, Takashima H, Oyama R;

XX WPI; 2002-500446/53.

XX Production of C-terminal modified proteins with nucleotide-linker
 PT containing modifying agents and translation templates, useful for
 PT detecting protein interaction in functional analysis of genes e.g. in
 PT genome projects.

XX Example 5; Page 88; 95pp; Japanese.

XX The invention relates to an agent for modifying the C-terminal of a
 CC protein comprising an acceptor region with a group capable of binding to
 CC a protein through a transpeptidation reaction in a protein translation
 CC system, and a modifying region containing a non-radioactive modifier
 CC linked to a part of the acceptor region via a nucleotide linker. The
 CC modified proteins are useful for detecting protein interaction in
 CC functional analysis of genes e.g. in genome projects, as well as protein-
 CC nucleic acid interaction in large quantities in high-throughput screening
 CC when studying biological molecules such as proteins and nucleic acids in
 CC genome function or proteome analysis. The modified proteins can be
 CC conveniently and quickly applied in studying protein interactions, with
 CC improved efficiency. ABK95189-ABK95225 represent PCR primers used in
 CC examples of the invention

XX SQ Sequence 22 BP; 0 A; 1 C; 13 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;
 Best Local Similarity 85.0%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGCGGCACT 249

Db 1 GTGGTGGTGGTGGTGGTGGT 20
 ||||| ||||| ||||| |||||

RESULT 487
 ADF70306/c

XX ADF70306 standard; DNA; 22 BP.

XX ADF70306;

XX 12-FEB-2004 (first entry)

XX CMV antisense oligonucleotide SeqID19.

XX expression modulation; hepatic system; sterol group; hepatotropic;
 KW gene therapy; hepatic disease; antisense therapy; ss.

XX Cytomegalovirus.

XX WO2003072711-A2.

XX 04-SEP-2003.

XX 21-FEB-2003; 2003WO-US005066.

XX 22-FEB-2002; 2002US-00080979.

XX (ISIS-) ISIS PHARM INC.

XX Cook PD, Manoharan M, Bennett FC;

XX WPI; 2003-679947/64.

XX Modulating the expression of a nucleic acid in the hepatic system, useful
 PT for treating hepatic disorders, comprises administering to the mammal an
 PT oligonucleotide that hybridizes to the nucleic acid to modulate its
 PT expression.

XX Example 7; SEQ ID NO 19; 99pp; English.

XX This invention relates to a novel method of modulating the expression of
 CC a nucleic acid in the hepatic system of a mammal which comprises
 CC administering to the mammal an oligonucleotide that hybridizes to the
 CC nucleic acid to modulate the expression of the nucleic acid, where the
 CC oligonucleotide has two sterol groups that are covalently bonded. The
 CC invention may be useful for the development of a compound with
 CC hepatotropic activity whilst the genetic sequences of the invention may
 CC prove useful for gene therapy. The methods are useful for treating
 CC hepatic disease or disorder associated with a protein encoded by a gene.
 CC Note: These oligonucleotides may have one or more of several
 CC modifications which are detailed in the specification, including having a
 CC phosphorothioate backbone or having ribonucleoside bases.

XX SQ Sequence 22 BP; 0 A; 6 C; 5 G; 10 T; 1 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;
 Best Local Similarity 85.0%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
 ||||| ||||| ||||| |||||

Db 22 CGCAAGAGAGAGCAACG 3

RESULT 488
 ADF77702/c

XX ADF77702 standard; DNA; 22 BP.

XX ADF77702;

XX 26-FEB-2004 (first entry)

XX Coriolus hirsutus cellulose hydrolytic gene primer #13.

transmembrane protein-like; NOV12a-12c show homology to beta-neoendorphin
 CC -dynorphin precursor. The present sequence represents a PCR primer used
 CC in the exemplification of the invention.

XX Sequence 22 BP; 9 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

SQ Query Match 0.9%; Score 15.2; DB 1; Length 22;

Best Local Similarity 85.0%; Pred. No. 6.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 836 TTGTCCTTGGATACCTGGAC 855

Db 21 TTGTCCTTGGATCCTGGAC 2

RESULT 490

AD001072

ID ADO01072 standard; DNA; 22 BP.

XX

AC ADO01072;

XX

DT 01-JUL-2004 (first entry)

XX

DE Drosophila P-element, EP, inverse PCR primer 5F3.

XX

KW Fruit fly; ss; PCR; Alzheimer's disease; Gamma secretase; Psn gene;
 KW P-element; EP; APPL-SV; Amyloid precursor-like protein; APP;
 KW suppressor of hairless transcription factor; Su(H);
 KW Vp16 activation domain; dementia; memory loss; language deterioration;
 KW impaired visuospatial skill; primer.

XX

OS Drosophila melanogaster.

XX

PN US2004067535-A1.

XX

PD 08-APR-2004.

XX

PF 03-OCT-2002; 2002US-00263929.

XX

PR 03-OCT-2002; 2002US-00263929.

XX

PA (LIFE-) LIFE SCI DEV CORP.

XX

PI Kim J, Galant R;

XX

PS WPI; 2004-355296/33.

XX

DR Identifying compound by exposing cell that expresses gene having

XX

PT enhancing or suppression effect on APPL-SV phenotype to agent,

XX

PT identifying modulation of Alzheimer's disease (AD), regulation of gene or

XX

PT protein expression with AD.

XX

PS Example 1; SEQ ID NO 210; 185pp; English.

XX

CC The invention relates to identifying a compound comprising exposing cell
 CC expressing gene 1 having enhancing or suppression effect on an APPL-SV
 CC phenotype (a transgenic fruit fly expressing the Amyloid precursor-like
 CC protein, APP, as a fusion protein with the suppressor of hairless
 CC transcription factor, Su(H) and Vp16 activation domain. The fusion
 CC protein is cleaved by gamma secretase (encoded by the Psn gene) to
 CC release the Su(H-Vp16, which affects wing vein development. Genes
 CC affecting Psn expression/activity were screened by crossing the APP-SV
 CC line with an EP P-element insertion library, and the DNA recovered from
 CC the appropriate EP strain and sequenced) chosen from ADO00863-ADO00964,
 CC being the identified fruit fly genes affecting APP processing and their
 CC mammalian homologues, identifying modulation of Alzheimer's disease (AD)
 CC symptom, regulation of biological pathway, gene expression or protein
 CC function associated with AD relative to cell in absence of agent. Also
 CC included are regulating AD (involves providing a subject with AD or
 CC symptoms of AD and an agent that changes the expression of a gene
 CC detailed above or changes the activity of a polypeptide having a sequence
 CC chosen from ADO00965-ADO01066, and treating the subject with the agent)
 CC and a composition (comprising a nucleic acid encoding a polypeptide

CC detailed above or an expression vector comprising the nucleic acid or a
 CC host cell comprising the expression vector or an antisense
 CC oligonucleotide that hybridises under stringent conditions to the nucleic
 CC acid or polypeptide or an antibody that specifically binds to the
 CC polypeptide). The method is useful for identifying compounds modulating
 CC symptom of Alzheimer's disease (AD), regulation of biological pathway
 CC associated with AD, or regulation of gene expression or protein function
 CC of gene or protein associated with AD. The nucleic acids and proteins are
 CC useful in drug screening and useful in screening and treating the subject
 CC having increased susceptibility to AD or symptoms of AD such as dementia,
 CC memory loss, language deterioration and impaired visuospatial skills. The
 CC present sequence is a PCR primer used to amplify fruit fly DNA flanking
 CC an EP insertion site.

XX Sequence 22 BP; 9 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

SQ Query Match

Best Local Similarity 0.9%; Score 15.2; DB 1; Length 22;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1522 GAGATTCAGCTACAAAGGA 1541

Db 1 GAGATGCATCTCACAAAGGA 20

AD008110

XX

ID ADO08110 standard; DNA; 22 BP.

XX

AC ADO08110;

XX

DT 01-JUL-2004 (first entry)

XX

DE Fly DNA PCR primer #2.

XX

KW Fly; PCR; ss; fat cell number; fat cell size; obesity; diabetes;

XX

KW anorectic; antidiabetic; primer.

XX

OS Diptera.

XX

PN US2004071700-A1.

XX

PD 15-APR-2004.

XX

PF 09-OCT-2002; 2002US-00267502.

XX

PR 09-OCT-2002; 2002US-00267502.

XX

PA (LIFE-) LIFE SCI DEV CORP.

XX

PI Kim J, Galant R;

XX

PS WPI; 2004-328526/30.

XX

CC Identifying compounds that influence fat cell number or size for treating
 CC or preventing obesity or diabetes by exposing the cell to the agent and
 CC identifying fat cell number or size relative to cells not exposed to the
 CC agent.

XX Example 1; SEQ ID NO 436; 275pp; English.

CC The invention relates to a method of identifying compounds that influence
 CC fat cell number or size comprising providing a cell that expresses a gene
 CC and an agent, exposing the cell to the agent and identifying fat cell
 CC number or size relative to cells not exposed to the agent. The method
 CC also comprises providing an expression vector and an agent, exposing the
 CC vector to the agent, detecting a change in expression of the gene
 CC relative to expression of the gene in an expression vector not exposed to
 CC the agent, treating a subject with the agent and identifying fat cell
 CC number or size in the subject. The agent comprises an antisense
 CC oligonucleotide. The subject comprises a mammal, preferably a human. The
 CC method also comprises providing a polypeptide and an agent, exposing the
 CC polypeptide to the agent, detecting binding of the agent to the

CC polypeptide or a change in an activity of the polypeptide, treating a
 CC subject with the agent and identifying fat cell number or size in the
 CC subject. The agent comprises an antibody. A method of regulating fat cell
 CC number or size comprises providing a subject containing fat cells and an
 CC agent that changes the expression of a gene, and treating the subject
 CC with the agent under conditions so that fat cell size or number in the
 CC subject is altered. The method is useful for identifying compounds that
 CC influence fat cell number or size, for preparing a composition for
 CC treating or preventing obesity or diabetes. This sequence represents a
 CC PCR primer used to amplify fly DNA used in the scope of the invention.

XX
 XX
 SQ Sequence 22 BP; 9 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;
 Best Local Similarity 85.0%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1522 GAGATTCAGCTACAAAGGA 1541
 DB 1 GAGATGCATCTACACAGGA 20
 ||||| ||||| ||||| |||||

RESULT 492
 ADQ16470/C
 ID ADQ16470 standard; DNA; 22 BP.
 XX
 AC ADQ16470;
 XX
 DT 09-SEP-2004 (first entry)
 XX
 DE Modified oligonucleotide used for NMR analysis #6.
 XX
 KW ss; antisense; hepatic tissue targeting; liver gene expression;
 KW improved biostability; altered biodistribution; DNA-RNA hybrid.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT misc_RNA 1
 FT /tag= a
 XX
 XX US6753423-B1.
 XX
 XX 22-JUN-2004.
 XX
 XX 10-APR-2000; 2000US-00546596.
 XX
 XX 12-SEP-1997; 97US-00928823.
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Cook PD, Manoharan M, Bennett CF;
 XX
 XX WPI; 2004-466815/44.
 XX
 XX Targeting an antisense oligonucleotide to hepatic tissues to modulate the
 XX expression of a gene in the liver involves conjugating the
 XX oligonucleotide to a cholesterol moiety and administering the conjugate.
 XX
 XX Example 7; SEQ ID NO 19; 64pp; English.

CC The invention relates to a method of targeting an antisense
 CC oligonucleotide to hepatic tissues involving conjugating the
 CC oligonucleotide to a cholesterol moiety and administering the conjugate.
 CC The method is useful for targeting an antisense oligonucleotide to
 CC hepatic tissues to modulate the expression of a gene in the liver. The
 CC oligonucleotide is useful in diagnostics, therapeutics, as research
 CC reagents and kits, in pharmaceutical composition and for treating
 CC diseases produced by undesired production of proteins. The method
 CC provides lipophilic oligonucleotide conjugates with improved biostability
 CC and altered biodistribution in mammals. The present sequence represents a
 CC modified oligonucleotide used for NMR analysis.

SQ Sequence 22 BP; 0 A; 6 C; 5 G; 10 T; 1 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;
 Best Local Similarity 85.0%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149
 DB 22 CGCAAGAAGAAGAGCAACG 3
 ||||| ||||| ||||| |||||

RESULT 493
 ADQ31052
 ID ADQ31052 standard; DNA; 22 BP.
 XX
 AC ADQ31052;
 XX
 DT 23-SEP-2004 (first entry)
 XX
 DE C-fos mRNA detection capture oligonucleotide.
 XX
 KW analyte detection; detection; probe; detection probe; reporter;
 KW capture oligonucleotide; human; c-fos; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT modified_base 1
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "5' labelled with rhodamine-6G (Rh6G)"
 XX
 XX W02004057023-A1.
 XX
 XX 08-JUL-2004.
 XX
 XX 19-DEC-2003; 2003WO-EP014661.
 XX
 XX 20-DEC-2002; 2002EP-00028582.
 XX
 XX 13-JAN-2003; 2003US-0439439P.
 XX
 XX (EVOT-) EVOTEC OAI AG.
 XX
 XX Hinna S, Lambrue D, Droegge S, Jaeger S, Gall K;
 XX
 XX WPI; 2004-543305/52.
 XX
 XX Detecting an analyte such as protein or nucleic acid, useful for
 XX screening drugs, comprises probe detection of captured analyte where
 XX surplus probe signal is quenched and/or differential emission wavelength
 XX of labeled support is measured.

PS Example 1; Page 20; 61pp; English.

CC The present invention describes a method for detecting an analyte in a
 CC sample. The method comprises: (a) providing detection probes being
 CC labelled with a first reporter, where the detection probes are capable of
 CC binding to the analyte; (b) providing a solid support; (c) providing
 CC capture probes being bound or capable of binding to the solid support,
 CC where the capture probes are capable of binding to the analyte, and so
 CC concentrating the analyte on the solid support; (d) contacting the sample
 CC with the detection probes, the solid support and the capture probes; and
 CC (e) detecting the detection probes where (i) the detection of detection
 CC probes is conducted in the presence of quenching probes binding to
 CC surplus detection probes not being bound to the analyte and thereby
 CC quenching at least partially an emission of the first reporter of said
 CC surplus detection probes, and/or (ii) the solid support is labelled with
 CC a second reporter different from the first reporter, imaging the sample
 CC at an emission wavelength of the second reporter, generating a mask
 CC obtained from imaging the sample at the emission wavelength of the second
 CC reporter and applying this mask to an image of the sample used for
 CC detecting the detection probes. The present sequence represents a capture

CC oligonucleotide used in the detection of c-fos mRNA, which is used in an
 CC example from the present invention.

SQ Sequence 22 BP; 5 A; 4 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;
 Best Local Similarity 85.0%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 873 CCTGGATGACTGTGGGAACA 892
 |||||
 Db 1 CCTGGATGATGCTGGGAACA 20

RESULT 494
 AAT58215/c
 ID AAT58215 standard; DNA; 23 BP.
 XX AC AAT58215;
 XX DT 20-MAY-1997 (first entry)
 XX DE Candida CDK1 gene primer.
 XX KW TYPI; CKS1; CDK1; CYB1; MOCL; CMK1; cell-cycle regulatory protein;
 KW Candida; anti-mycotic; antifungal; preservative; yeast; cyclin; kinase;
 KW phosphatase; ss.
 XX OS Synthetic.
 XX FN WO9639527-AL.
 XX PD 12-DEC-1996.
 XX PF 05-JUN-1996; 96WO-US008807.
 XX PR 05-JUN-1995; 95US-00463090.
 XX PA (MITO-) MITOTIX INC.
 XX PI Cottarel G, Damagnez V, Draetta G;
 XX WPI; 1997-043149/04.

Candida cell-cycle regulatory proteins - used to develop prods. for the
 diagnosis, treatment and prevention of fungal infections.

Example 3; Page 35; 70pp; English.

XX Six Candida genes have been isolated, which encode an apparent CDC25
 CC phosphatase (TYPI), a p13suc1 homolog (CKS1), a cyclin dependent kinase
 CC (CDK1), a cyclin (CYB1), a CDK-activating kinase catalytic subunit
 CC (MOCL), and a Map kinase (CMK1) (AAT6446 to AAT6451). The TYPI
 CC polypeptide and nucleic acid is claimed, where TYPI is at least 75%
 CC homologous to the amino acid sequence given in Seq 2, according to the
 CC claims of the specification. According to the disclosure, Seq 2 encodes
 CC CKS1 (AAT6446) and Seq 1 encodes TYPI (AAT6447). The products may be
 CC used in reagents and assays which permit the rapid detection and
 CC evaluation of Candida yeast infections and for identifying cpds. which
 CC have antifungal properties and which may be used as anti-mycotic agents.
 CC Such agents can be used therapeutically, as well as, for example,
 CC preservatives in foodstuff, feed supplement for promoting weight gain in
 CC livestock, or in disinfectant formulations for treatment of non-living
 CC matter, e.g. for decontaminating hospital equipment and rooms

SQ Sequence 23 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 8 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 23;
 Best Local Similarity 60.9%; Pred. No. 6.5e+02;
 Matches 14; Conservative 3; Mismatches 6; Indels 0; Gaps 0;

QY 1093 ACACTGTGTACCGGCCCTGA 1115
 || : |||||: |||||

Db 23 ACNYTNTGGTAYMGNCNCNGA 1

RESULT 495

AAT94132/c
 ID AAT94132 standard; DNA; 23 BP.
 XX AC AAT94132;
 XX DT 22-MAY-1998 (first entry)

XX DE Primer 9826 for haematopoietic cytokine receptor Zcytor1 cDNA.
 XX KW Haematopoietic cytokine receptor; Zcytor1; ligand detection;
 KW cancer diagnosis; agonist; antagonist; PCR primer; ss.
 XX OS Synthetic.
 XX OS Mus sp.
 XX PN WO9744455-AL.
 XX PD 27-NOV-1997.

XX PF 19-MAY-1997; 97WO-US008502.

XX PR 23-MAY-1996; 96US-00653740.

XX PA (ZYMO) ZYMOGENETICS INC.

XX PI Baumgartner JW, Foster DC, Grant FJ, Sprecher CA;
 XX WPI; 1998-018509/02.

XX PT Haematopoietic cytokine receptor - useful for ligand detection, and
 XX PT pathological condition diagnosis.

XX PS Example 5; Page 65; 86pp; English.

XX CC The present sequence is a primer for the cDNA encoding a haematopoietic
 CC cytokine receptor Zcytor1, useful for ligand detection, and pathological
 CC condition diagnosis, including cancer. Receptor agonists of the protein
 CC can be used to stimulate the proliferation and development of target
 CC cells in vitro and in vivo. The agonists can stimulate cell mediated
 CC immunity and lymphocyte proliferation, to treat infection involving
 CC immunosuppression, e.g. viral infections. They may also be used to
 CC suppress tumours, induce cytotoxicity, treat leukaemias and enhance the
 CC regeneration of the T-cell repertoire after bone marrow transplantation.
 CC Antagonists of the protein may be used to suppress the immune system,
 CC treat autoimmune diseases, including rheumatoid arthritis, multiple
 CC sclerosis and diabetes mellitus. Immune suppression caused by the
 CC antagonists can also be used to reduce rejection of tissue or organ
 CC transplants and grafts, and to treat T-cell specific leukaemias and
 CC lymphomas

SQ Sequence 23 BP; 4 A; 5 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 23;
 Best Local Similarity 85.0%; Pred. No. 6.5e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1294 TCCACGAGGAGTTCAGAC 1313
 |||||
 Db 23 TCCACGAGCAGTTCAAGTC 4

RESULT 496

AAZ23767
 ID AAZ23767 standard; DNA; 23 BP.
 XX AC AAZ23767;
 XX DT 14-JAN-2000 (first entry)

```
DE Cloning vector multiple cloning site 3 DNA.
XX
XX Antisense; DNA library; identification; multiple cloning site; MCS;
KW inhibition; ss.
XX
XX Synthetic.
XX
XX WO9950457-A1.
XX
XX 07-OCT-1999.
XX
XX 28-MAR-1999; 99WO-US006742.
XX
XX 28-MAR-1998; 98US-0079792P.
XX
XX 06-NOV-1998; 98US-0107504P.
XX
XX (UTAH ) UNIV UTAH RES FOUND.
XX
XX Ruffner DE, Pierce ML, Chen Z;
XX
XX WPI; 1999-610866/52.
XX
XX Production of antisense libraries, used for identifying antisense agents
XX and for identifying target sites for antisense-mediated inhibition of a
XX selected gene.
XX
XX Claim 3; Page 37; 63pp; English.
XX
XX This invention describes a novel method for generating an antisense
XX library targeted to a selected RNA transcript. The methods can be used
XX for identifying antisense agents and for identifying target sites for
XX antisense-mediated inhibition of a selected gene. The use of a direct
XX library for target site selection significantly simplifies the screening
XX process, since only very small libraries need be prepared and assayed.
XX
XX AA223765-223767 represent multiple cloning site DNA regions used in the
XX method of the invention
XX
XX Sequence 23 BP; 8 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 23;
XX Best Local Similarity 85.0%; Pred. No. 6.5e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 364 GAGAGTGACACGAGGCTTCAGC 383
XX 4 GACAGTCACCAAGCTTCAGC 23
XX
XX Db
XX
XX RESULT 497
XX AAZ08273/c
XX ID AAZ08273 standard; DNA; 23 BP.
XX
XX AC AAZ08273;
XX
XX 07-FEB-2000 (first entry)
XX
XX Degenerate PCR primer-1 used for cloning of Candida CDK1 gene.
XX
XX Cell cycle regulatory protein; CDK1 gene; cyclin dependent kinase;
XX Candida; isolate; clone; degenerate primer; genomic DNA; amplify; ss.
XX
XX Synthetic.
XX
XX WO9957536-A2.
XX
XX 11-NOV-1999.
XX
XX 05-MAY-1999; 99WO-US009878.
XX
XX 05-MAY-1998; 98US-00072994.
XX
XX (MITO-) MITOTIX INC.
XX
XX
XX Berlin V, Cottarel G, Damagnez V, Rudolph J, Sullivan D;
XX
XX WPI; 2000-038847/03.
XX
XX New Candida cyclin activated kinase 1, useful for generating vaccines and
XX screening for its inhibitors.
XX
XX Example 3; Page 58; 109pp; English.
XX
XX The present DNA sequence is the degenerate PCR primer-1, used to clone
XX Candida cyclin dependent kinase, CDK1 gene. It is a cell cycle regulatory
XX protein isolated from the genomic DNA of Candida albicans and was
XX amplified using PCR
XX
XX Sequence 23 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 8 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 23;
XX Best Local Similarity 60.9%; Pred. No. 6.5e+02;
XX Matches 14; Conservative 3; Mismatches 6; Indels 0; Gaps 0;
XX
XX QY 1093 AACTGTGTACCGGCCCTGA 1115
XX 23 ACNTTGTGTAYMGNCNCNGA 1
XX
XX Db
XX
XX RESULT 498
XX AAA97452/c
XX ID AAA97452 standard; DNA; 23 BP.
XX
XX AC AAA97452;
XX
XX 29-JAN-2001 (first entry)
XX
XX Chicory germacrene A synthase A PCR primer, SEQ ID NO:11.
XX
XX Chicory; short germacrene A synthase clone; germacrene A synthase A;
XX sesquiterpene lactone biosynthesis; bitterness; pest resistance; insect;
XX nematode; micro-organism; flavour compound; fragrance; phytoalexin;
XX transgenic plant; PCR primer; ss.
XX
XX Cichorium intybus.
XX
XX Synthetic.
XX
XX WO200055338-A1.
XX
XX 21-SEP-2000.
XX
XX 10-MAR-2000; 2000WO-EP002130.
XX
XX 12-MAR-1999; 99EP-00870046.
XX
XX (ABDL-) AB-DLO RES INST AGROBIOLOGY & SOIL FERTI.
XX
XX Bouwmeester H, Kodde J, De Kraker J;
XX
XX WPI; 2000-638203/61.
XX
XX Novel sesquiterpenoid synthase genes useful for reducing bitterness and
XX increasing resistance against insects, nematodes, microorganisms and
XX vertebrate herbivores in plants.
XX
XX Example 3; Page 33; 77pp; English.
XX
XX The invention relates to two chicory germacrene A synthases (AAB23174,
XX AAB23175), and to nucleic acids encoding them (AAA97448, AAA97449).
XX Germacrene A synthases plays a key role in the biosynthesis of
XX sesquiterpene lactones, catalysing the formation of a germacrene
XX biosynthetic precursor from farnesyl diphosphate (FDP). Sesquiterpene
XX lactones are bitter- flavoured plant products which provide resistance
XX against insects, nematodes, microorganisms and vertebrate herbivores, and
XX are also involved in plant-plant interactions. Nucleic acids encoding of
XX chicory germacrene A synthases A and B are useful for the production of
XX transgenic plants with modified sesquiterpenoid synthase activity.
```


CC Reduction of germacrene A synthase expression (e.g., via the use of
 CC antisense sequences) can be used to reduce bitter flavours in crops, thus
 CC increasing their commercial value. Increased germacrene A synthase
 CC expression may be used to obtain increased insect, nematode or
 CC microorganism resistance in plants, to obtain increased formation of
 CC sesquiterpene lactones with desirable properties (e.g., medicinal
 CC properties), and to obtain increased formation of germacrene A-derived
 CC flavour and fragrance compounds or phytoalexins. Sequences AAA97452-
 CC A97453 represent PCR primers used in an exemplification of the invention
 CC to introduce restriction sites into the chicory germacrene A synthase A
 CC cDNA (AAA97448) for subcloning

XX Sequence 23 BP; 4 A; 9 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 23;

Best Local Similarity 85.0%; Pred. No. 6.5e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 116 CGATGCCCATGGATCGGATG 135

DB 21 CGAGAGCCATGGTTCGGATG 2

RESULT 499

AAH19543

ID AAH19543 standard; DNA; 23 BP.

AC AAH19543;

XX

XX 23-JUL-2001 (first entry)

DE Human Fc-epsilonRI alpha-chain gene oligonucleotide #2.

XX Human; transcription activation; immunoglobulin E; IgE; IgE receptor;

KW Fc-epsilonRI; USF-1; USF-2; allergy; ss.

XX Homo sapiens.

XX JP2001057889-A.

XX 06-MAR-2001.

XX 23-AUG-1999; 99JP-00234854.

XX 23-AUG-1999; 99JP-00234854.

XX (ASAK) ASahi BREWERIES LTD.

PA (TSUR/) TSURA T.

XX WPI; 2001-310666/33.

XX DNA having a transcription activating region of a gene, used for

PT developing an agent for preventing and treating allergic diseases.

XX Example 4; Page 6; 12pp; Japanese.

XX The present sequence is provided in a specification relating to a DNA

CC sequence which activates transcription of human high affinity

CC immunoglobulin (Ig/E receptor (Fc-epsilonRI) alpha-chain gene. It may be

CC used for inhibiting the activation of transcription relating to USF-1 or

CC USF-2. The DNA contains the sequence tggggagcagctgggtaggac, or cagctg.

CC The invention is useful for the development of an agent for preventing

CC and treating allergic diseases. The present sequence was annealed to its

CC complementary sequence to generate the double stranded DNA sequence of

CC the invention

XX Sequence 23 BP; 3 A; 12 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 23;

Best Local Similarity 85.0%; Pred. No. 6.5e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 918 GTTCTGTTCACGCTGCTCC 937

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XX

DB 1 GTTCTACCCGAGCTGCTCC 20

RESULT 500

AAF99964/c

ID AAF99964 standard; DNA; 23 BP.

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PN JP2001321190-A.
XX
PD
XX
XX 20-NOV-2001.
XX
PF 12-MAR-2001; 2001JP-00068285.
XX
PR 10-MAR-2000; 2000JP-00066716.
XX
XX (RIKA ) RIKAGAKU KENKYUSHO.
PA (GENO-) GENOTEX YG.
XX
XX WPI; 2002-144136/19.
XX
XX Arraying genome clones.
PT
XX
XX Claim 4; Page 10; 528pp; Japanese.
PS
XX
XX The present invention describes a method of arraying genome clones. The
CC method comprises: (a) clones of the genomic libraries contained in
CC multiwell plates numbered for discrimination are mixed in each of the
CC multiwell plates; (b) a primer designed based on the chromosome marker
CC sequence is added to the mixture to carry out an amplification reaction;
CC (c) a signal corresponding to the marker is detected from the resultant
CC amplified product to specify the discrimination Nos. of the multiwell
CC plates containing the clones having said marker sequence; (d) the order
CC of the markers is changed so that the same discrimination Nos. succeed to
CC the maximum in the specified discrimination Nos. to array the multiwell
CC plates; (e) the clones in the multiwell plates of the specified
CC discrimination Nos. are mixed respectively in each wells of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX
XX Sequence 23 BP; 11 A; 10 C; 1 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 23;
Best Local Similarity 85.0%; Pred. No. 6.5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1063 CCAACCAAGACATCTCCAA 1082
Db 1 CCAACCAAGACATCTCCAA 20
|||||
RESULT 502
AAD58475/c
ID AAD58475 standard; DNA; 23 BP.
XX
XX AAD58475;
AC
XX
XX 20-NOV-2003 (first entry)
DT
XX
XX Antisense PCR primer used in the creation of 1lbetaHSD2 mice.
DE
XX
XX Mouse; transgenic; 1l-beta hydroxysteroid dehydrogenase type 2; therapy;
KW 1lbetaHSD2; cardiac dysfunction; PCR; primer; ss.
KW
XX
XX Mus musculus.
OS
XX
XX WO2003068153-A2.
PN
XX
XX 21-AUG-2003.
PD
XX
XX 12-FEB-2003; 2003WO-US004054.
PF
XX
XX 13-FEB-2002; 2002US-0355812P.
PR
XX
XX 11-FEB-2003; 2003US-00361848.
PR

(PHAA ) PHARMACIA CORP.
XX
PA McMahon EG, Wenning Q, Goellner J, Rudolph AE;
PI
XX
XX WPI; 2003-671623/63.
DR
XX
XX New transgenic mouse expressing an increased activity of enzyme 1l-beta
PT hydroxysteroid dehydrogenase 2 in its heart, useful as a model system for
PT identifying and developing new drugs for treating cardiac dysfunction..
PT
XX
XX Example 1; Page 9; 35pp; English.
PS
XX
XX The invention relates to a transgenic mouse which expresses an increased
CC amount of enzyme activity of 1l-beta hydroxysteroid dehydrogenase type 2
CC (1lbetaHSD2) in its heart relative to a non-transgenic isogenic mouse.
CC The transgenic mouse is useful as a model system for identifying and
CC developing new drugs for treating cardiac dysfunction. The present
CC sequence is a PCR primer used in the creation of 1lbetaHSD2 mice
XX
XX Sequence 23 BP; 7 A; 8 C; 7 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 23;
Best Local Similarity 85.0%; Pred. No. 6.5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 237 TGGTGGCGGCGACGTGACCCCTG 256
Db 22 TGGTGGCGGCGACGTGACCCCTG 3
|||||
RESULT 503
ABZ84155/c
ID ABZ84155 standard; DNA; 23 BP.
XX
XX ABZ84155;
AC
XX
XX 14-MAY-2003 (first entry)
DT
XX
XX Toxicologically relevant rat PCR primer #1314.
DE
XX
XX Toxicologically relevant gene; toxicological response; PCR primer; ss.
KW
XX
XX Rattus sp.
OS
XX
XX Synthetic.
OS
XX
XX WO2003016500-A2.
PN
XX
XX 27-FEB-2003.
PD
XX
XX 16-AUG-2002; 2002WO-US026514.
PF
XX
XX 16-AUG-2001; 2001US-0313080P.
PR
XX
XX (PHAS-) PHASE-1 MOLECULAR TOXICOLOGY INC.
PA
XX
XX Neft RE, Dunn RT, Adkins K, Pickett GG, Kier LD, Schweiser K;
PI Alen P;
XX
XX WPI; 2003-268322/26.
DR
XX
XX Determining a toxicological response to an agent, useful for screening of
PT drugs, comprises comparing the expression profile of one or more human
PT toxic response genes to a reference gene expression profile indicative of
PT toxicity.
PT
XX
XX Claim 1; Page 334; 455pp; English.
PS
XX
XX The present invention describes a method (M1) for determining a
CC toxicological response to an agent, which comprises comparing the
CC expression profile of one or more human toxic response genes to a
CC reference gene expression profile indicative of toxicity, and so
CC determining the presence of a toxic response to the agent. Also
CC

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described: (1) an array comprising one or more polynucleotides selected from the genes corresponding to the partial sequences given in AB282842 to AB284764, or their fragments of at least 20 nucleotides, or homologues ; and (2) determining if a gene putatively identified to be a toxic response gene plays a role on toxic response pathways by determining the expression profile of the gene after exposure of cells or a human subject to a known toxic pharmaceutical or industrial agent, comprising: (a) exposing cells to an agent or isolating cells from a human subject who was exposed to an agent; (b) obtaining the test gene expression profile for a putatively identified toxic response gene after exposure to a known toxic pharmaceutical or industrial agent; and (c) comparing the test profile to the expression profile of a gene with a similar function or comparing the test profile to the expression profile of that gene after exposure to other known toxic compounds. The methods are useful for predicting and determining toxicological responses on a cellular, organ or system level. The arrays comprising the human genes are useful for toxicological screening of drugs, pharmaceutical compounds and chemicals

Sequence 23 BP; 3 A; 7 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 23;
Best Local Similarity 85.0%; Pred. No. 6.5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 845 AGTACTGTGACAGGACCTG 864
||| | ||||| |||||
Db 22 AGTCGCGGACAGGACCTG 3

RESULT 504
ADM32957/C
ID ADM32957 standard; DNA; 23 BP.
AC ADM32957;
XX
XX
DT 17-JUN-2004 (first entry)
XX
DE PCR primer P74 used to amplify 150bp cDNA encoding To32 N-terminal.
XX
XX protein production; moss; protoplast; To32 protein;
KW thaumatin-like protein; PCR; primer; ss.
XX
XX Synthetic.
OS
XX
XX WO2004024927-A1.
PN
XX
XX 25-MAR-2004.
PD
XX
XX 08-SEP-2003; 2003WO-EP009959.
PF
XX
XX 12-SEP-2002; 2002EP-00020382.
PR
XX
XX 11-JUL-2003; 2003EP-00015881.
PR
XX
XX (GREE-) GREENOVATION BIOTECH GMBH.
PA
XX
XX Gorr G, Launhardt H, Berg B;
PI
XX
XX WPI; 2004-270051/25.
DR
XX
XX Achieving transient expression of at least an extracellular non-plant protein from a heterologous nucleotide sequence in moss protoplast comprises transiently introducing into the protoplast a heterologous nucleic acid construct.
PT
XX
XX Disclosure; Page 18; 49pp; English.
PS
XX
XX The specification describes a method for the production of extracellular non-plant protein from moss protoplasts. The method comprises transiently introducing into the protoplast a heterologous nucleic acid construct comprising a heterologous nucleotide sequence operably linked to a promoter. The heterologous nucleotide sequence encodes a protein selected from heterodimer, fusion antibody, immunoglobulin or single-chain antibody. The method is useful for protein production. PCR primers

CC ADM32956-ADM32957 were used to amplify a 150 bp fragment of cDNA encoding the N-terminal of a plant thaumatin-like To32 protein, in the course of the invention.
CC
CC
XX
SQ Sequence 23 BP; 7 A; 6 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 23;
Best Local Similarity 85.0%; Pred. No. 6.5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 916 CTGTCTCTGTCAGCTGCT 935
||| | ||||| |||||
Db 21 CTGACCTGTCTCAGCTGCT 2

RESULT 505
ADM10656
ID ADM10656 standard; DNA; 23 BP.
AC ADM10656;
XX
XX
DT 15-JUL-2004 (first entry)
XX
DE Multiple cloning site for antisense/hairpin oligonucleotides #3.
XX
XX RNA interference; gene silencing; MMP9; ds; hairpin; siRNA.
KW
XX
XX Synthetic.
OS
XX
XX US2004077082-A1.
PN
XX
XX 22-APR-2004.
PD
XX
XX 18-OCT-2002; 2002US-00273678.
PF
XX
XX 18-OCT-2002; 2002US-00273678.
PR
XX
XX (KOEH/) KOEHN R K.
PA
XX
XX (RUFF/) RUFFNER D E.
PA
XX
XX (PRAK/) PRAKASH R K.
XX
XX
XX Koehn RK, Ruffner DE, Prakash RK;
PI
XX
XX WPI; 2004-340007/31.
DR
XX
XX New sequence-specific oligonucleotide for silencing genes comprises a 3' end, a 5' end and a targeting region positioned between the 3' end and the 5' end.
PT
XX
XX Disclosure; SEQ ID NO 13; 37pp; English.
PS
XX
XX The invention relates to a compound for silencing a gene comprising a single-stranded nucleic acid molecule having a 3' end, a 5' end and a targeting region positioned between the 3' end and the 5' end, where the targeting region comprises a sequence targeted to a target region in the gene, and the 3' end and the 5' end each comprise a sequence that enables the formation of a hairpin structure. Also included are a recombinant vector comprising a nucleic acid encoding the compound cited above, a host cell comprising the nucleic acid mentioned above, an oligonucleotide having the structure H 2 -R 1 -H 1 (where R 1 is an oligonucleotide consisting essentially of RNA or DNA of about 8-50 nucleotides configured to silence a substrate nucleic acid, and where H 1 and H 2 are oligonucleotides having sequences that enable the formation of a hairpin structure), a pharmaceutical composition for silencing a gene (comprising a pharmaceutical carrier and the single-stranded nucleic acid molecule mentioned above) and a method of silencing a gene in a cell. The composition and method are useful for gene silencing purposes. RNA (e.g. siRNA) and DNA oligonucleotides are provided which are useful in silencing the MMP9 (not defined) gene targeting the F9 region. The present sequence is a multiple cloning site which is inserted into a vector, used to express libraries of antisense oligonucleotides which are incorporated into terminal hairpin-containing oligonucleotides.

SQ	Sequence 23 BP; 8 A; 7 C; 5 G; 3 T; 0 U; 0 Other;	Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
	Query Match 0.9%; Score 15.2; DB 1; Length 23; Best Local Similarity 85.0%; Pred. No. 6.5e+02; Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;	
QY	364 GAGAGTGACGAGCTTCAGC 383 	
Db	4 GACAGTCACCAAGCTTCAGC 23	
RESULT 506		
AAF50618		
ID	AAF50618 standard; DNA; 15 BP.	
XX	AC	
XX	AAF50618;	
XX	AC	
XX	30-MAR-2001 (first entry)	
XX	IGF-I oligonucleotide #1578.	
DE		
XX	Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.	
XX	Homo sapiens.	
OS		
XX	WO200078341-A1.	
PN		
XX	28-DEC-2000.	
XX		
XX	21-JUN-2000; 2000WO-AU000693.	
PF		
XX	28-DEC-2000.	
XX		
XX	21-JUN-1999; 99US-0140345P.	
PR		
XX	(MURD-) MURDOCH CHILDRENS RES INST.	
XX		
XX	Wraight CJ, Werther GA, Edmondson SR;	
PI		
XX	WPI; 2001-041421/05.	
DR		
XX		
XX	Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.	
PT		
PT		
PT		
PT		
PT		
PT		
PS		
XX	Example 8; Page 71; 20ipp; English.	
XX	The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153- F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia	
XX	Sequence 15 BP; 2 A; 7 C; 4 G; 2 T; 0 U; 0 Other;	
SQ		
	Query Match 0.9%; Score 15; DB 1; Length 15; Best Local Similarity 100.0%; Pred. No. 4.8e+02; Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	1100 GTACCGGCCCCCTGA 1114 	
Db	1 GTACCGGCCCCCTGA 15	
RESULT 507		
AAF50617		
ID	AAF50617 standard; DNA; 15 BP.	
XX	AC	
XX	AAF50617;	
XX	AC	
XX	30-MAR-2001 (first entry)	
DT		
XX	IGF-I oligonucleotide #1577.	
DE		
XX	Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.	
XX	Homo sapiens.	
OS		
XX	WO200078341-A1.	
PN		
XX	28-DEC-2000.	
XX		
XX	21-JUN-2000; 2000WO-AU000693.	
PF		
XX	21-JUN-1999; 99US-0140345P.	
PR		
XX	(MURD-) MURDOCH CHILDRENS RES INST.	
XX		
XX	Wraight CJ, Werther GA, Edmondson SR;	
PI		
XX	WPI; 2001-041421/05.	
DR		
XX		
XX	Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.	
PT		
PT		
PT		
PT		
PT		
PT		
PS		
XX	Example 8; Page 71; 20ipp; English.	
XX	The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153- F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia	
XX	Sequence 15 BP; 1 A; 7 C; 5 G; 2 T; 0 U; 0 Other;	
SQ		
	Query Match 0.9%; Score 15; DB 1; Length 15; Best Local Similarity 100.0%; Pred. No. 4.8e+02; Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	1100 GTACCGGCCCCCTG 1114 	
Db	1 GTACCGGCCCCCTGA 15	

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Db      1  GGTACGGGCCCCCTG 15
RESULT 508
AAF50619
ID  AAF50619 standard; DNA; 15 BP.
XX
XX  AAF50619;
AC
XX
DT  30-MAR-2001 (first entry)
XX
XX  IGF-I oligonucleotide #1579.
DE
XX
XX  Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW  cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW  skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW  IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW  growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW  keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW  hyperneovascular condition; hyperplasia; kidney disease;
KW  neovascular condition of the retina; ss.
XX
XX  Homo sapiens.
OS
XX
XX  WO200078341-A1.
FN
XX
XX  28-DEC-2000.
PD
XX
XX  21-JUN-2000; 2000WO-AU000693.
PF
XX
XX  21-JUN-1999; 99US-0140345P.
PR
XX
XX  (MURD-) MURDOCH CHILDRENS RES INST.
PA
XX
XX  Wright CJ, Werther GA, Edmondson SR;
PI
XX
XX  WPI; 2001-041421/05.
DR
XX
XX  Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT  UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT  inhibits or reduces growth factor mediated cell proliferation and/or
PT  inflammation.
XX
XX  Example 8; Page 71; 201pp; English.
PS
XX
XX  The present invention relates to a method for ameliorating the effects of
CC  skin disorders. The method comprises contacting the skin with an
CC  antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC  receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC  inhibiting or reducing growth factor mediated cell proliferation,
CC  inflammation and/or other disorders. The present invention is an
CC  oligonucleotide which can be used to design the antisense
CC  oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC  F45161). The method is useful for ameliorating the effects of psoriasis,
CC  ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC  neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC  hyperneovascular condition such as a neovascular condition of the retina,
CC  brain or skin, growth factor-mediated malignancies, other sclerotic
CC  disease, kidney disease, hyperproliferation of the inside of blood
CC  vessels or any other hyperplasia
XX
XX  Sequence 15 BP; 2 A; 8 C; 3 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred.No. 4.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1102 TACCGGCCCCCTGAC 1116
Db 1 TACCGGCCCCCTGAC 15
RESULT 509
AAF50619
ID  AAF50619 standard; DNA; 15 BP.
XX
XX  AAF50619;
AC
XX
DT  30-MAR-2001 (first entry)
XX
XX  IGF-I oligonucleotide #1579.
DE
XX
XX  Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW  cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW  skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW  IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW  growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW  keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW  hyperneovascular condition; hyperplasia; kidney disease;
KW  neovascular condition of the retina; ss.
XX
XX  Homo sapiens.
OS
XX
XX  WO200078341-A1.
FN
XX
XX  28-DEC-2000.
PD
XX
XX  21-JUN-2000; 2000WO-AU000693.
PF
XX
XX  21-JUN-1999; 99US-0140345P.
PR
XX
XX  (MURD-) MURDOCH CHILDRENS RES INST.
PA
XX
XX  Wright CJ, Werther GA, Edmondson SR;
PI
XX
XX  WPI; 2001-041421/05.
DR
XX
XX  Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT  UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT  inhibits or reduces growth factor mediated cell proliferation and/or
PT  inflammation.
XX
XX  Example 8; Page 71; 201pp; English.
PS
XX
XX  The present invention relates to a method for ameliorating the effects of
CC  skin disorders. The method comprises contacting the skin with an
CC  antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC  receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC  inhibiting or reducing growth factor mediated cell proliferation,
CC  inflammation and/or other disorders. The present invention is an
CC  oligonucleotide which can be used to design the antisense
CC  oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC  F45161). The method is useful for ameliorating the effects of psoriasis,
CC  ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC  neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC  hyperneovascular condition such as a neovascular condition of the retina,
CC  brain or skin, growth factor-mediated malignancies, other sclerotic
CC  disease, kidney disease, hyperproliferation of the inside of blood
CC  vessels or any other hyperplasia
XX
XX  Sequence 15 BP; 2 A; 8 C; 3 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred.No. 4.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1102 TACCGGCCCCCTGAC 1116
Db 1 TACCGGCCCCCTGAC 15
RESULT 509
AAF50619
ID  AAF50619 standard; DNA; 15 BP.
XX
XX  AAF50619;
AC
XX
DT  30-MAR-2001 (first entry)
XX
XX  IGF-I oligonucleotide #1579.
DE
XX
XX  Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW  cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW  skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW  IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW  growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW  keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW  hyperneovascular condition; hyperplasia; kidney disease;
KW  neovascular condition of the retina; ss.
XX
XX  Homo sapiens.
OS
XX
XX  WO20003049691-A2.
FN
XX
XX  19-JUN-2003.
PD
XX
XX  06-DEC-2002; 2002WO-US039138.
PF
XX
XX  07-DEC-2001; 2001US-00017621.
PR
XX
XX  (ISIS-) ISIS PHARM INC.
PA
XX
XX  Freier SM, Roach MP;
PI
XX
XX  WPI; 2003-577271/54.
DR
XX
XX  New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT  gene expression, particularly useful for treating hyperproliferative or
PT  neurological disorders for example, mental retardation, or
PT  thrombocytopenia.
XX
XX  Example 13; Page 71; 104pp; English.
PS
XX
XX  The invention relates to antisense compounds, compositions and methods
CC  for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC  PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC  treating an animal having a disease or condition associated with PCTAIRE
CC  protein kinase 1, particularly a hyperproliferative disease or a
CC  neurological disease. These diseases include thrombocytopenia, mental
CC  retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC  with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC  disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC  particularly useful for inhibiting the expression of PCTAIRE protein
CC  kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC  or as research reagents or kits. The present sequence is human PCTAIRE
CC  protein kinase 1 DNA specific PCR primer. This sequence is used to
CC  illustrate the method of the invention
XX
XX  Sequence 15 BP; 1 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred.No. 4.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 95 AGGTTGCTCGCGCGC 109
Db 1 AGGTTGCTCGCGCGC 15
RESULT 510
AAZ57670
ID  AAZ57670 standard; DNA; 18 BP.
XX
XX  AAZ57670;
AC
XX
XX  05-APR-2000 (first entry)
DT
XX
XX  Human G-alpha-12 antisense inhibitor ISIS# 20658.
DE

```

```
XX G-alpha-12 inhibitor; antisense compound; cell differentiation; cancer;
KW cell growth; metastatic growth; ss; ISIS# 20658.
XX Homo sapiens.
XX US9598206-A.
XX 07-DEC-1999.
XX 23-FEB-1999; 99US-00256496.
XX 23-FEB-1999; 99US-00256496.
XX (ISIS-) ISIS PHARM INC.
XX Cowsert LM;
XX WPI; 2000-095920/08.
XX Antisense inhibition of human G-alpha-12 expression.
XX Example 15; Col 38; 36pp; English.
XX This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a
CC member of the G12/13 subfamily of G-proteins. The primary function of G-
CC alpha-12 is in cell differentiation and growth. The invention relates to
CC antisense compounds which are 8-30 nucleotides long (see AA257668-
CC 257746). The antisense molecules are targeted to the human G-alpha-12
CC nucleic acid molecule, and inhibit the expression of G-alpha-12. The
CC molecules preferably have a modified internucleotide linkage, and at
CC least one modified sugar moiety. The compounds target different regions
CC of the human G-alpha-12 RNA. The expression of human G-alpha 12 is
CC inhibited by contacting human cells or tissues in vitro with the
CC antisense molecules. The oligonucleotides are used in modulating the
CC function of nucleic acid molecules encoding G-alpha-12, ultimately
CC modulating the amount of G-alpha-12 produced. The antisense compounds can
CC be utilized for diagnostics, therapeutics, prophylaxis and as research
CC agents and kits. They may be useful in the treatment of cancer, and
CC metastatic growth
XX
XX Sequence 18 BP; 4 A; 4 C; 9 G; 1 T; 0 U; 0 Other;
Query Match 0.9%; Score 15; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 5.7e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1633 AGCAGGCGCGCTG 1647
DB 1 AGCAGGCGCGCTG 15
RESULT 511
ADM57525
ID ADM57525 standard; DNA; 18 BP.
XX
XX ADM57525;
XX
XX 03-JUN-2004 (first entry)
XX
XX M. tuberculosis PCR primer RvD4-intr-PPE.
XX
XX antibacterial; vaccine; mmpL6; Mycobacterium; BCG; Tbd1; ss; PCR; primer.
XX Mycobacterium tuberculosis.
XX OS
XX EPI338657-A1.
XX
XX 27-AUG-2003.
XX
XX 25-FEB-2002; 2002EP-00290458.
XX
XX 25-FEB-2002; 2002EP-00290458.
XX
```

```
XX (INSP ) INST PASTEUR.
XX Cole S, Brosch R, Gordon S, Eiglmeier K, Garnier T;
XX WPI; 2003-699254/67.
XX
XX New Tbd1 nucleic acids having the mutation CTG to CGG at codon 463 of
PT gene katG, useful for distinguishing Mycobacterium tuberculosis infection
PT from M. africanum, M. canetti, M. microti, M. bovis, or M. bovis BCG
PT infection.
XX
XX Disclosure; Page 21; 73pp; English.
XX
XX The invention relates to a novel isolated or purified nucleic acid. A
CC polypeptide encoded by a nucleic acid of the invention has antibacterial
CC activity, and may have a use in a vaccine. The nucleic acid is a Tbd1
CC nucleic acid having a fully defined sequence of 3953 bp given in the
CC specification. The Tbd1 deletion or mmpL6 551 polymorphism is useful as a
CC genetic marker for the differentiation of Mycobacterium strain of M.
CC tuberculosis complex. The genetic marker in association with at least one
CC genetic markers selected from RD1, RD2, RD3, RD4, RD5, RD6, RD7, RD8,
CC RD9, RD10, Rd11, Rd13, Rd14, RvD1, RvD2, RvD3, RvD4, RvD5, katG463,
CC gyrA95, oxyR'285, and pncA57, may be used for the differentiation of
CC Mycobacterium strain of M. tuberculosis complex. The nucleic acids may
CC also be used to distinguish an infection resulting from M. tuberculosis
CC from an infection resulting from M. africanum, M. canetti, M. microti, M.
CC bovis, M. bovis BCG. The present sequence is used in the exemplification
CC of the invention.
XX
XX Sequence 18 BP; 0 A; 4 C; 10 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 5.7e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 232 GGTGGTGGTGGCGGC 246
DB 3 GGTGGTGGTGGCGGC 17
RESULT 512
AAA82618
ID AAA82618 standard; DNA; 19 BP.
XX
XX AAA82618;
XX
XX 04-DEC-2000 (first entry)
XX
XX cdk2 ribozyme binding site #55.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
XX OS
XX WO200032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
```

PS Disclosure; Page 49; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAH57780. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment.

XX Sequence 19 BP; 2 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

SQ

Query Match 0.9%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 922 CTGTTCCAGCTGCTC 936
|||||

Db 5 CTGTTCCAGCTGCTC 19

RESULT 513
AAH57780
ID AAH57780 standard; DNA; 19 BP.
XX
AC AAH57780;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:204.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.

XX Homo sapiens.
OS Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
PI
XX WPI; 2001-300427/31.
DR
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.

XX Example 1; Page 86; 408pp; English.

XX The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic,

CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention

XX
XX Sequence 19 BP; 2 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

SQ

Query Match 0.9%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 922 CTGTTCCAGCTGCTC 936
|||||

Db 5 CTGTTCCAGCTGCTC 19

RESULT 514
AAQ15415
ID AAQ15415 standard; DNA; 20 BP.
XX
AC AAQ15415;
XX
DT 25-MAR-2003 (revised)
DT 19-MAR-1992 (first entry)
XX
DE Probe to mutant sequence #5 of exon 3 of human c-Ha-ras gene.
XX
KW polymerase chain reaction; PCR; nested primer; mutation; screening; ras oncogene; ss.

XX Synthetic.

XX
FH Key Location/Qualifiers
FT misc_feature 10..13
FT /*tag= a
FT /note= "mutant TaqI site"
XX
XX BP461496-A.
XX
XX 18-DEC-1991.
XX
XX 01-JUN-1991; 91EP-00108976.
XX
XX 08-JUN-1990; 90EP-00110907.
XX
XX (BEHW) BEHRINGWERKE AG.
XX
XX Cerutti PA, Felleybosc E, Sandy M, Amstad P, Zijlstra J;
PI Pourzand C;
PI
XX WPI; 1991-370527/51.
DR
XX
XX Quantitative determination of DNA sequences - contg. mutationally eliminated restriction site(s), chain reaction using polymerase amplification and elimination of wild-type sequences.

XX Example 2; Page 9; 16pp; English.

XX This is one of 12 probes which differ only in the sequence at the TaqI site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511. The "mutant" probes are used to detect the 12 possible base-pair mutations potentially induced by treatment of cells with the carcinogen ethylnitrosourea. (Updated on 25-MAR-2003 to correct PI field.)

XX Sequence 20 BP; 4 A; 10 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 970 CTACACCGAGACCTC 984
|||||
Db 5 CTACACCGAGACCTC 19

RESULT 515

AAT39013
ID AAT39013 standard; DNA; 20 BP.
XX
AC AAT39013;
XX
DT 29-MAY-1997 (first entry)
XX
DE Interleukin IL-8 hybridisation probe.
XX
KW Cytokine; expression profile; genital wart; interleukin 12; IL-12;
KW tumour regression; adjuvant; polymerase chain reaction; PCR;
KW condyloma acuminata; human papilloma virus; HPV-6; HPV-11; HPV16; HPV18;
KW anogenital; cutaneous; laryngeal; oesophageal; cancer; ss.
XX
OS Synthetic.

XX WO9629091-A1.

XX 26-SEP-1996.

XX 22-MAR-1996; 96WO-GB000686.

XX 22-MAR-1995; 95GB-00005784.

XX (UYCA-) UNIV CAMBRIDGE TECH SERVICES LTD.

XX Stanley MA, Scarpini CG;

XX WPI; 1996-442947/44.

XX Use of interleukin-12 to treat papilloma virus-associated lesions - esp.
PT as a vaccine adjuvant with papilloma virus antigen for immuno:therapy of
PT warts or tumours.

XX Disclosure; Page 16; 32pp; English.

XX RNA was extracted from genital lesions, reverse transcribed to produce
CC cDNA and then the cDNA was used as the template for PCR amplification of
CC various cytokines using the primers in AAT38964- AAT39005. To confirm the
CC identity of amplified cDNA, digoxigenin- labelled probes specific for
CC each cytokine (see AAT39006-T39021) were hybridised with Southern blots
CC of amplified sequences. The expression profile for regressing and non-
CC regressing warts was established and compared to cytokine expression
CC patterns in normal cervical tissue. Results showed that interleukin 12 is
CC barely expressed (if at all) in non-regressing warts, but is expressed in
CC regressing warts. This suggests a central role for IL-12 in wart
CC regression. It has been found that IL-12 can be used (especially as a
CC vaccine adjuvant) for treating papilloma virus-associated lesions such as
CC condyloma acuminata (anogenital warts) caused by human papilloma virus
CC type 6 (HPV-6) and/or HPV-11 and more generally for treatment of tumours
CC associated with HPV16 and HPV18 infection e.g. anogenital, cutaneous,
CC laryngeal and oesophageal cancers

XX Sequence 20 BP; 9 A; 5 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1068 AAAGACATACCTCAA 1082
|||||
Db 2 AAAGACATACCTCAA 16

RESULT 516

ADA66485
ID ADA66485 standard; DNA; 20 BP.

XX ADA66485;

XX 20-NOV-2003 (first entry)

XX Transforming growth factor-beta 3 antisense oligonucleotide, SEQ ID 44.

XX Cytostatic; antirheumatic; antiarthritic; gynecological;
KW antiarteriosclerotic; Transforming Growth Factor beta-3; TGF beta-3;
KW hyperproliferative disorder; cancers; atherosclerosis;
KW rheumatoid arthritis; preclampsia; fibrosis; phosphorothioate; ss.

XX Synthetic.

XX Key Location/Qualifiers

XX modified_base 1..20

XX /tag= a

XX /mod_base= OTHER

XX /note= "this oligonucleotide has a phosphorothioate
backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
and 3' ends, which are 5 nucleotides in length. Also all
cytidine residues are 5-methylcytidines"

XX WO2003008544-A2.

XX 30-JAN-2003.

XX 12-JUL-2002; 2002WO-US022423.

XX 14-JUL-2001; 2001US-00906158.

XX (ISIS-) ISIS PHARM INC.

XX Monia BP, Freier SM;

XX WPI; 2003-229569/22.

XX Novel antisense compound which is targeted to nucleic acid encoding
PT transforming growth factor beta-3, and inhibits expression of TGF-beta 3,
PT useful for treating a condition associated with TGF-beta 3, e.g. cancer.

XX Claim 3; Page 87; 154pp; English.

XX The present invention relates to antisense oligonucleotides (ADA66459-
CC ADA66609), which inhibit Transforming Growth Factor (TGF) beta-3
CC expression. The oligonucleotides are useful for inhibiting the expression
CC of TGF-beta3 in cells or tissues, and for treating an animal having a
CC disease condition associated with TGF-beta3, e.g. a hyperproliferative
CC disorder such as cancers of lung, liver, colon, oesophagus, pancreas,
CC breast, skin or haematopoietic, atherosclerosis, rheumatoid arthritis,
CC preclampsia and fibrosis.

XX Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 449 TCTCCACTGAGGACA 463

Db 2 TCTCCACTGAGGACA 16

RESULT 517

ADA66486
ID ADA66486 standard; DNA; 20 BP.

XX ADA66486;


```

XX 20-NOV-2003 (first entry)
XX Transforming growth factor-beta 3 antisense oligonucleotide, SEQ ID 45.
XX
XX Cytostatic; antirheumatic; antiarthritic; gynecological;
XX antiarteriosclerotic; Transforming Growth Factor beta-3; TGF beta-3;
XX hyperproliferative disorder; cancers; atherosclerosis;
XX rheumatoid arthritis; preeclampsia; fibrosis; phosphorothioate; ss.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "This oligonucleotide has a phosphorothioate
XX backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
XX and 3' ends, which are 5 nucleotides in length. Also all
XX cytidine residues are 5-methylcytidines"
XX
XX WO2003008544-A2.
XX
XX 30-JAN-2003.
XX
XX 12-JUL-2002; 2002WO-US022423.
XX
XX 14-JUL-2001; 2001US-00906158.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Freier SM;
XX
XX WPI; 2003-229569/22.
XX
XX Novel antisense compound which is targeted to nucleic acid encoding
XX transforming growth factor beta-3, and inhibits expression of TGF-beta 3,
XX useful for treating a condition associated with TGF-beta 3, e.g. cancer.
XX
XX Claim 3; Page 87; 154pp; English.
XX
XX The present invention relates to antisense oligonucleotides (ADA66459-
XX ADA66609), which inhibit Transforming Growth Factor (TGF) beta-3
XX expression. The oligonucleotides are useful for inhibiting the expression
XX of TGF-beta3 in cells or tissues, and for treating an animal having a
XX disease condition associated with TGF-beta3, e.g. a hyperproliferative
XX disorder such as cancers of lung, liver, colon, oesophagus, pancreas,
XX breast, skin or haematopoietic, atherosclerosis, rheumatoid arthritis,
XX preeclampsia and fibrosis.
XX
XX Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.3e+02;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 449 TCTCCACTGAGGACA 463
XX
XX Db 6 TCTCCACTGAGGACA 20
XX
XX
XX RESULT 518
XX AAQ37151
XX ID AAQ37151 standard; DNA; 21 BP.
XX
XX AC AAQ37151;
XX
XX 25-MAR-2003 (revised)
XX 23-JUN-1993 (first entry)
XX
XX Probe to detect interleukin-8 sequences.
XX
XX IL-8; alpha; cytokine synthesis inhibitor; inflammation;

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```

KW monokine production; Southern analysis; ss.
XX Synthetic.
XX
XX WO9302693-A2.
XX
XX 18-FEB-1993.
XX
XX 06-AUG-1992; 92WO-US006378.
XX
XX 06-AUG-1991; 91US-00742129.
XX
XX (SCHE ) SCHERING CORP.
XX
XX De Naal Malefyt R, Howard M, Hsu DH, Ishida H, Ogarra A, Spits H;
XX Zlotnik A;
XX
XX WPI; 1993-076172/09.
XX
XX Use of interleukin-10 to modulate inflammation or T-cell mediated immune
XX function - for treating septic and toxic shock, auto-immune diseases,
XX tumours and infections diseases.
XX
XX Example B6; Page 85; 208pp; English.
XX
XX Northern and Southern hybridisations were performed to determine the
XX level at which IL-10 and IL-4 inhibit monokine production. The probe
XX AAQ37151 was used in Southern analysis of PCR products to detect IL-8
XX alpha coding sequences. The sequence of the probe corresponds to
XX nucleotides 200-221 of the sequence given in Schmid et al., (1987),
XX J.Immunol. It was found that IL-1 alpha, IL-6, TNF alpha, GM-CSF and G-
XX CSF expression was strongly inhibited by IL-10 and IL-4 at the mRNA
XX level. IL-1 beta and IL-8 expression was only slightly affected by IL-10.
XX (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 21 BP; 9 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 6.6e+02;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1068 AAAGACATACCTCAA 1082
XX
XX Db 2 AAAGACATACCTCAA 16
XX
XX
XX RESULT 519
XX AAV08002
XX ID AAV08002 standard; DNA; 21 BP.
XX
XX AC AAV08002;
XX
XX 20-JAN-1999 (first entry)
XX
XX DE Probe IL-8 for Interleukin-10 coding sequence.
XX
XX Interleukin-10; IL-10; septic shock; bacterial infection; toxic shock;
XX infectious shock; inflammation; immune response modulation; therapy;
XX probe; ss.
XX
XX Synthetic.
XX
XX US5833976-A.
XX
XX 10-NOV-1998.
XX
XX 24-MAR-1995; 95US-00410654.
XX
XX 06-AUG-1991; 91US-00742129.
XX
XX 06-AUG-1992; 92US-00926853.
XX
XX 19-APR-1994; 94US-00229854.
XX
XX (SCHE ) SCHERING CORP.
XX

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XX PI Ishida H, Malefyt RDW, O'garra A, Spits H, Howard M, Zlotnik A;
PI Hsu D;
XX WPI; 1999-008644/01.
XX Treating shock conditions from e.g. bacterial infections - comprises
XX administering interleukin-10.
XX Example 14; Col 42; 109pp; English.
XX This sequence represents a probe for an interleukin-10 (IL-10) coding
XX sequence. The IL-10 protein can be used in the method of the invention
XX for ameliorating a symptom of: (a) septic shock in a host suffering from
XX a bacterial (preferably gram negative) infection; (b) toxic shock; (c)
XX infectious shock; or (d) inflammation. The method comprises administering
XX a biologically active IL-10 (preferably human) protein, analogue or a
XX fragment (preferably full length). The treatment is used to modulate
XX immune responses caused by the different shock syndromes, which are
XX endotoxin or superantigen induced toxicity, or autoimmune related
XX conditions. The conditions are side-effects of microbial infections,
XX caused by release of their protein products, especially on anti-microbial
XX treatment, which when cells are killed, they lyse, releasing proteins
XX which induce the shock conditions. IL-10 inhibits TNF-alpha (tumour
XX necrosis factor-alpha) and TNF-gamma synthesis, which as part of an
XX immune response elicits the shock syndromes
XX SQ Sequence 21 BP; 9 A; 6 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1068 AAGACATATCTCAA 1082
DB 2 AAGACATATCTCAA 16

RESULT 520
AAQ43129/c
ID AAQ43129 standard; DNA; 23 BP.
AC AAQ43129;
XX 25-MAR-2003 (revised)
DT 23-SEP-1993 (first entry)
XX HCV type 1 NS-4 sense primer 196.
XX Non-coding region; hepatitis C virus; blood donor; type 2; type 1; HCV;
KW NS-5; phylogeny; differentiation; NS-3; core region; type 3; PCR;
KW amplify; polymerase chain reaction; primer; NS4; ss.
XX Synthetic.
XX WO9310239-A2.
XX 27-MAY-1993.
XX 20-NOV-1992; 92WO-GB002143.
XX 21-NOV-1991; 91GB-00024696.
XX 24-JUN-1992; 92GB-00013362.
XX (COMM-) COMMON SERVICES AGENCY.
XX Simmonds P, Chan S, Yap PL;
XX WPI; 1993-182554/22.
XX DNA encoding antigenic peptide(s) of new types of hepatitis C virus - for
XX diagnosing and treating HCV infection, screening blood samples and
XX identifying different HCV types.

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XX Disclosure; Page 27; 120pp; English.
XX The sequences given in AAQ43112-33 are primers which were used to amplify
XX specific regions of the hepatitis C virus (HCV) genome. Analysis of
XX regions of the HCV genome revealed the existence of three distinct groups
XX of HCV. Analysis of the region encompassing -255 to -62 of the 5' non
XX coding region (NCR) (see AAQ43058-75) showed a difference of 9-14% in the
XX nucleotide sequences between the three groups. Two of the groups
XX identified were similar to those of HCV variants termed type 1 and 2,
XX whilst the third appeared to represent a novel type of virus. Comparison
XX of the NS3 region (see AAR37927-30) showed a high degree of sequence
XX diversity with type 3 being phylo- genetically different to type 1 and 2.
XX The same degree of differentiation was noted in the NS-5 (see AAR37923-
XX 26), core region (see AAR37931) and the NS4 region (see AAQ43106-111)
XX between type 3 and type 1 sequences. (Updated on 25-MAR-2003 to correct
XX PN field.)
XX SQ Sequence 23 BP; 5 A; 6 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;
Best Local Similarity 78.3%; Pred. No. 7.1e+02;
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 292 CGTTCTGCACGGGCCCACTCAG 314
DB 23 CATTCTGACGGGCCCACTCTG 1

RESULT 521
AAT41227
ID AAT41227 standard; DNA; 23 BP.
XX AAT41227;
XX 03-DEC-1996 (first entry)
XX Human gene signature HUMGS01473-derived sense primer.
XX Gene signature; messenger RNA; mRNA; relative abundance; frequency;
KW human; cloning; mapping; non-biased library; diagnosis; detection;
KW cell typing; abnormal cell function; primer; PCR; amplification;
KW polymerase chain reaction; ss.
XX Synthetic.
XX WO9514772-A1.
XX 01-JUN-1995.
XX 11-NOV-1994; 94WO-JP001916.
XX 12-NOV-1993; 93JP-00355504.
XX (MATS/) MATSUBARA K.
XX (OKUB/) OKUBO K.
XX Matsubara K, Okubo K;
XX WPI; 1995-206931/27.
XX Single-stranded DNA for identifying gene signatures - isolated from 3'-
XX directed human cDNA library that reflects relative abundance of corresp.
XX mRNA in specific human tissues.
XX Example 7; Fig 8; 2245pp; Japanese.
XX Primers T41001-T41382 are derived from novel human gene signature (GS)
XX sequences which did not match with sequences deposited in Genbank release
XX 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
XX libraries prepared from various human tissues; synthesis of cDNA was
XX initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
XX Each library is constructed so as to reflect accurately the relative

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CC abundance of different mRNAs in the particular tissue from which it was
 CC derived. The appearance frequency of a given GS in a cDNA library can be
 CC determined (esp. using primers and probes derived from the GS sequences)
 CC as a means of diagnosing abnormal cell function or for recognising
 CC different cell types. The primers T41227-8 amplify clone pm2231 which
 CC comprises the GS HUMGS001473 (T20473), located on chromosome 22
 XX
 SQ Sequence 23 BP; 5 A; 5 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 7.1e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 396 TGAAGTGCAGTCTCCAGTGAGAG 418
 ||||| ||||| ||||| ||||| |||||
 Db 1 TGAGCTGCACCTTACCTGTGAGAG 23

RESULT 522
 AAT59709/c
 ID AAT59709 standard; DNA; 23 BP.
 XX
 AC AAT59709;
 XX
 DT 12-MAY-1997 (first entry)
 XX
 DE PCR primer CRYVIR.
 XX
 KW Gene expression cassette; promoter; alcr regulator; insecticide;
 KW CryIA(c); CryV; crystal protein; delta-endotoxin; Bacillus thuringiensis;
 KW Lepidoptera; insect resistance; transgenic plant; crop protection;
 KW biological control; polymerase chain reaction; PCR; primer; ss.
 XX
 OS Synthetic.
 XX
 PN WO9706268-A2.
 XX
 PD 20-FEB-1997.
 XX
 PF 29-JUL-1996; 96WO-GB001846.
 XX
 PR 08-AUG-1995; 95GB-00016241.
 XX
 PA (ZENE) ZENECA LTD.
 XX
 PI Jepson I, Paine JAM;
 XX
 DR WPI; 1997-154272/14.
 XX
 PT Chemically inducible expression cassette - contains inducible promoter
 PT activated by alcr regulator in presence of alcohol or ketone inducer,
 PT used for insecticide production in plants.
 XX
 PS Example 6; Page 13; 52pp; English.
 XX
 CC PCR primers (AAT59707-11) were designed to test tobacco (Nicotiana
 CC tabacum cv. Samsun) plants for the presence of Bacillus thuringiensis-
 CC derived CryV (see also AAT59702) and CryIA(c) (see also T597012)
 CC sequences following Agrobacterium-mediated transformation with vectors
 CC carrying novel constitutive or inducible gene expression cassettes.
 CC Constitutive CryIA(c) expression was confirmed using primer pairs TMV1
 CC (AAT59705)/CRYIA2R (AAT59706) and CRYIA1 (AAT59707)/NOS (AAT59708),
 CC constitutive CryV expression with TMV1/CRYVIR (AAT59709) and CRYV1
 CC (AAT59710)/NOS, and inducible CryIA(c) expression with ALCRI
 CC (AAT59711)/NOS
 XX
 SQ Sequence 23 BP; 4 A; 7 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 7.1e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 515 TGGAGAGCTGACCTCAATAGC 537

Db 23 TGGAGCAGGTGACCACTTACAGC 1
 ||||| ||||| ||||| ||||| |||||

RESULT 523
 AAZ60724/c
 ID AAZ60724 standard; DNA; 23 BP.
 XX
 AC AAZ60724;
 XX
 DT 16-MAY-2000 (first entry)
 XX
 DE PCR primer used to amplify mu-opioid receptor splice variant cDNA.
 XX
 KW Mu-opioid receptor; MOR-1; splice variant; morphine analgesia;
 KW opioid-mediated ingestive response; opioid activity; analgesic;
 KW gastrointestinal motility; respiration; immune system; endocrine system;
 KW autonomous nervous system; peristalsis regulator; body weight;
 KW neuroendocrine disorder; PCR primer; ss.
 XX
 OS Mus sp.
 XX
 PN WO200004046-A2.
 XX
 PD 27-JAN-2000.
 XX
 PF 15-JUL-1999; 99WO-US015974.
 XX
 PR 16-JUL-1998; 98US-0092980P.
 XX
 PA (SLOK) SLOAN KETTERING INST CANCER RES.
 XX
 PI Pasternak G, Pan Y;
 XX
 DR WPI; 2000-182402/16.
 XX
 PD New splice variants of the mu-opioid receptor, useful in screening for
 PT selective analgesics and for regulating morphine analgesia or body
 PT weight.
 XX
 PS Example 1; Page 33; 83pp; English.
 XX
 CC The present PCR primer was used to amplify cDNA encoding a fragment
 CC containing exon 1c of a murine mu-opioid receptor (MOR-1) splice variant.
 CC The specification describes 11 new exons for the MOR-1 gene, which
 CC combine to yield 15 novel splice variants of the MOR-1 gene. These splice
 CC variants are potential targets for modulating morphine analgesia and
 CC opioid-mediated ingestive responses. The MOR-1 polypeptide is used to
 CC screen compounds for opioid activity. Such compounds are potential
 CC analgesics or more generally agents that affect gastrointestinal
 CC motility, respiration or the immune, endocrine or autonomous nervous
 CC systems, e.g. regulators of peristalsis. Antagonists, agonists and
 CC ligands of MOR-1, as well as DNA vectors expressing MOR-1-encoding
 CC nucleic acids, or sequences antisense to MOR-1 nucleic acids, are used to
 CC regulate morphine analgesia and body weight. The level of MOR-1 or tissue
 CC distribution of MOR-1 can be measured to diagnose MOR-1 related
 CC pharmacological abnormalities or neuroendocrine disorders, particularly
 CC inherited disorders. Transgenic animals with extra copies of the MOR-1
 CC gene, or with endogenous alleles deleted, are used to study loss or gain
 CC of function phenotypes
 XX
 SQ Sequence 23 BP; 4 A; 3 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 7.1e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1715 GCCTGAGCCATGTTCACTGCCC 1737
 ||||| ||||| ||||| ||||| |||||
 Db 23 GCCTTAGCCACTACACCTGCCC 1

RESULT 524

```
AAA29067
ID AAA29067 standard; DNA; 23 BP.
XX
XX AC
XX AAA29067;
XX
XX DT 12-SEP-2000 (first entry)
XX
XX DE Sense PCR primer for human beta-actin gene.
XX
XX KW osteopathic; transforming growth factor-beta; TGF-beta; binding protein;
XX BEER; chromosome 17q12-21; gene therapy; antisense therapy; fracture;
XX KW bone mineralization; primer; beta-actin; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200032773-A1.
XX
XX PD 08-JUN-2000.
XX
XX PF 24-NOV-1999; 99WO-US027990.
XX
XX PR 27-NOV-1998; 98US-0110283P.
XX
XX PA (DARW-) DARWIN DISCOVERY LTD.
XX
XX PI Brunkow ME, Galas DJ, Kovacevich B, Mulligan JT, Paepers BW;
XX PI Van Ness J, Winkler DG;
XX PI WPI; 2000-412321/35.
XX
XX DT Nucleic acids (1) encoding a transforming growth factor beta binding
XX protein, useful for identifying agents for treating osteopenia,
XX PT osteoporosis and fractures.
XX
XX PS Example 2; Page 56; 162pp; English.
XX
XX CC AAA29067-68 are primers for amplification of the human beta-actin gene
XX which was used as a control when amplifying the BEER gene to determine
XX its tissue-specificity. BEER is a human transforming growth factor-beta
XX (TGF-beta) binding protein (BEER). The hBEER gene has been localized to
XX the chromosome 17q12-21. The cDNA and protein may be used for prevention,
XX treatment and diagnosis of diseases associated with inappropriate BEER
XX expression. For example, they may be used to treat disorders associated
XX with decreased TGF-beta BP expression. The cDNA or vectors may be
XX administered to treat diseases by rectifying mutations or deletions in a
XX patient's genome that affect the activity of BEER by expressing inactive
XX proteins or to supplement the patients own production of BEER
XX polypeptides. The nucleic acids may be used for recombinant production of
XX BEER gene therapy, antisense therapy, as probes for diagnostic assays
XX and for functional studies. BEER may be used to raise antibodies and for
XX polypeptides. BEER may be used to raise antibodies and for
XX identification of BEER modulators. BEER antagonists may be used to
XX increase bone mineral content for the treatment of disorders such as
XX osteopenia, osteoporosis, fractures and other disorders associated with
XX low mineral content
XX
XX SQ Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 0.9%; Score 15; DB 1; Length 23;
Best Local Similarity 78.3%; Pred. No. 7.1e+02;
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
Qy 506 AGGGCTACTGGAGAGCTGACC 528
||| ||| ||| ||| ||| ||| ||| |||
Db 1 AGGCCAACCGCGAAGATGACC 23
||| ||| ||| ||| ||| ||| ||| |||
RESULT 525
AAA13193
ID AAA13193 standard; DNA; 23 BP.
XX
XX AC AAA13193;
XX
XX XX 20-JUL-2000 (first entry)
XX
```

```
XX
DE PCR primer 944-966 used in alpha4-integrin polymorphism detection.
XX
KW PCR primer; alpha4-integrin; single nucleotide polymorphism; SNP; human;
KW autoimmune disease; allergy; inflammatory disease; multiple sclerosis;
KW rheumatoid arthritis; asthma; genetic marker; detect; ss.
XX
OS Homo sapiens.
XX
XX PN WO200017394-A1.
XX
XX PD 30-MAR-2000.
XX
XX PF 15-SEP-1999; 99WO-GB003071.
XX
XX PR 19-SEP-1998; 98GB-00020339.
XX PR 10-NOV-1998; 98GB-00024506.
XX
XX PA (ZENE ) ZENECA LTD.
XX
XX PI Morten JEN;
XX
XX DR WPI; 2000-283615/24.
XX
XX PT Detecting single nucleotide polymorphisms in the alpha 4-1 integrin
XX subunit gene, useful for diagnosing e.g. autoimmune disease and for
XX screening for ligand antagonists.
XX
XX PS Example 4; Page 24; 38pp; English.
XX
XX CC This sequence represents a PCR primer used in the detection of a single
XX nucleotide polymorphism (SNP) in the human alpha4-integrin promoter
XX nucleotide sequence defined in EMBL L26059. The invention relates to the
XX nucleotide sequence of SNPs in the human alpha4-integrin subunit gene, comprising
XX diagnosis of SNPs in the human alpha4-integrin subunit gene, comprising
XX determining the sequence of the gene in at least one of 5 positions
XX within the coding region and/or 8 positions within the promoter region of
XX the gene. Diagnosis of SNPs in the human alpha4-integrin subunit gene
XX comprises determining the gene sequence in at least one of the following
XX positions: (1) 740, 2273, 2446, 3311 and 3506 in the coding region (as
XX defined in EMBL Accession No. L12002); (2) 967 in the promoter region
XX (EMBL L26509) and/or (3) 184, 238, 331, 436, 676, 1010 or 1115 in the
XX promoter region (EMBL M26841). The method is used to identify subjects
XX with (or at risk of developing) alpha4-integrin subunit ligand mediated
XX diseases, e.g. autoimmune, allergic and vascular inflammatory diseases
XX such as multiple sclerosis, rheumatoid arthritis and allergic asthma. It
XX is also used to identify patients who will benefit from treatment with
XX particular alpha4-integrin ligand antagonists, to predict likely clinical
XX responses and to determine the therapeutic dose. Nucleic acid sequences
XX that contain at least one polymorphism are used to screen for compounds
XX that modify expression of alpha4-integrin, potentially useful as
XX therapeutic agents that may target selectively one or more alleles of the
XX gene. They may also be useful as antisense therapeutics. A computer-
XX readable storage medium containing the polymorphic sequences is useful
XX for homology searches, mapping, haplotyping, genotyping and
XX pharmacogenetic, or other bioinformatic, analysis. The polymorphisms,
XX particularly those at 2273, 3311 and 1010, which are relatively common,
XX are useful as genetic markers in linkage studies
XX
XX SQ Sequence 23 BP; 6 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15; DB 1; Length 23;
Best Local Similarity 78.3%; Pred. No. 7.1e+02;
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
Qy 60 ACTGCTGAACCCAGGGAGGCG 82
||| ||| ||| ||| ||| ||| ||| |||
Db 1 ACTTCTGAACCCAGAGCTGGCC 23
||| ||| ||| ||| ||| ||| ||| |||
RESULT 526
AAS04272
ID AAS04272 standard; DNA; 23 BP.
XX
XX XX
```

AC AAS04272;
 XX 07-SEP-2001 (first entry)
 XX Human TANGO 298 TagMan probe.
 XX
 XX Human secreted protein; TANGO 298; chromosome 19p13; probe; bone marrow;
 KW complement factor D; alternative complement pathway;
 KW complement regulator deficiency; serine protease dysfunction; adipsin;
 KW obesity; diabetes; blood and haematopoietic associated disorder;
 KW cardiovascular disorder; inflammatory disorder; immune disorder; ss.
 XX Homo sapiens.
 XX
 XX
 FH Key Location/Qualifiers
 FT modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER=FAM (6-carboxyfluorescein)"
 FT modified_base 23
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER=TAMRA"
 XX WO200130831-A1.
 XX
 XX 03-MAY-2001.
 XX
 XX 27-OCT-2000; 2000WO-US029797.
 XX
 XX 27-OCT-1999; 99US-00417796.
 PR 17-MAY-2000; 2000US-00572275.
 XX
 XX (MILL-) MILLENNIUM PHARM INC.
 PA
 XX Fraser CC, Hodge MR;
 PI
 XX WPI; 2001-300479/31.
 XX
 XX New nucleic acid molecule encoding type II transmembrane proteins useful
 PT for treating immune related disorders.
 PT
 XX Example 1; Page 103; 137pp; English.
 XX
 XX The present sequence for human TANGO 298 TagMan probe is used to measure
 CC human TANGO 298 gene expression by quantitative PCR. TANGO 298 (AAU02497)
 CC is a novel secreted protein isolated from clone jymMail18f02 from a human
 CC bone marrow cDNA library. The gene for TANGO 298 maps to chromosome
 CC 19p13.3. TANGO 298 shows sequence homology to human adipsin (complement
 CC factor D) and may play a role in the alternative complement pathway and
 CC in regulation of systemic energy balance. TANGO 298 may be used to treat
 CC complement regulator deficiencies (e.g. proxymal nocturnal
 CC haemoglobinuria), obesity, diabetes, blood and haematopoietic associated
 CC disorders (e.g. leukaemia), monocyte associated disorders (e.g. impaired
 CC phagocytosis) cardiovascular disorders (e.g. unstable angina,
 CC atherosclerosis), immune disorders (e.g. arthritis, AIDS), inflammatory
 CC disorders (e.g. bacterial infection), disorders associated with abnormal
 CC serine protease function (e.g. Alzheimer's disease) and platelet
 CC disorders (e.g. thrombosis). The invention also describes the novel
 CC secreted proteins human TANGO 269 (AAU02495) and murine TANGO 269
 CC (AAU02496)
 XX
 SQ Sequence 23 BP; 6 A; 13 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 7.1e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1353 CCACGACCCCGACT 1367
 DB 4 CCACGACCCCGACT 18

RESULT 527
 AAF30591
 ID AAF30591 standard; DNA; 23 BP.
 XX
 AC AAF30591;
 XX
 XX 11-JUN-2001 (first entry)
 DT
 XX Human Factor V gene PCR primer A F5 (254) -23D.
 DE
 XX Factor V; human; FV gene; bi-directional PCR; Bi-PASA; mutation;
 KW zygosity; homozygote; heterozygote; genetic screening; diagnosis;
 KW venous thromboembolism; PCR primer; ss.
 XX
 XX Homo sapiens.
 OS
 OS Synthetic.
 XX
 XX US6207425-B1.
 PN
 XX 27-MAR-2001.
 PD
 XX 10-SEP-1998; 98US-00150900.
 PF
 XX 11-SEP-1997; 97US-0058575P.
 PR
 XX (CITY) CITY OF HOPE.
 PA
 XX Liu Q, Sommer SS;
 PI
 XX WPI; 2001-256850/26.
 DR
 XX
 XX Conducting a bi-directional polymerase chain reaction amplification of
 PT specific alleles, involves amplifying DNA containing one or both of two
 PT alleles using an outer pair of primers and an inner pair of primers.
 XX
 XX Example; Col 13; 22pp; English.
 PS
 XX
 XX The present sequence is that of human Factor V (FV) gene primer A F5 (254)
 CC -23D, used in bi-directional PCR amplification of specific alleles (Bi-
 CC PASA). Its name indicates an A primer for FV (F5), the 5' end beginning
 CC at base 254 of the FIX gene exon 10 and proceeding downstream for 23
 CC bases. It also has a 5' G8C2 tail. A mutation (G to A transition) at bp
 CC 266 in exon 10 of the FV gene (see AAF30549) is associated with venous
 CC thromboembolism. Detection of the mutation in the FV gene was used to
 CC validate Bi-PASA. In Bi-PASA, 2 outer primers (P and Q) and 2 inner
 CC primers (A and B) are used. A and B are each specific for different
 CC alleles. P is complementary to the antisense strand of both alleles in a
 CC region upstream of the sequence difference (mismatch). Q is complementary
 CC to the sense strand of both alleles in a region downstream of the
 CC mismatch. In heterozygotes, 3 segments are amplified: a segment of size
 CC A0 resulting from 1 allele, another of size PB resulting from the 2nd
 CC allele, and a combined segment of size PQ. In homozygotes, segment PQ and
 CC either segments A0 or PB amplify. Under optimal PCR conditions, the
 CC relative yield of DNA products obtained using the present primer was
 CC high, as indicated by a very strong DNA band on agarose gels. Bi-PASA
 CC provides a one-tube method for simultaneously differentiating homozygotes
 CC and heterozygotes. It can detect small deletions and insertions as well
 CC as single base changes. Bi-PASA is also used to perform population
 CC screening, haplotype analysis, patient screening and carrier testing. The
 CC method is rapid, reproducible, inexpensive, non-isotopic and amenable to
 CC automation
 XX
 SQ Sequence 23 BP; 2 A; 8 C; 12 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 7.1e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 242 GCGGAGTGACCTGGAGAGGCC 264
 DB 1 GCGGCGGGGCGCTGGACAGGCC 23

RESULT 528
 ABT06518
 ID ABT06518 standard; DNA; 23 BP.
 XX
 AC ABT06518;
 XX
 DT 07-NOV-2002 (first entry)
 XX
 DE Retinoic acid receptor beta promoter methylation specific primer #4.
 XX
 KW Human; methylated gene; methylation; breast cancer; marker; WT-1;
 KW cell proliferative disorder; TWIST; HOXA5; NES-1; RARBeta; cyclin D2;
 KW retinoic acid receptor beta; oestrogen receptor; Wilms' tumour;
 KW 14.3.3 sigma; HIN-1; RASSF1A; tumour suppressor gene; hypermethylation;
 KW PCR; primer; ss.
 XX
 OS Unidentified.
 XX
 PN WQ200259347-A2.
 XX
 PD 01-AUG-2002.
 XX
 PF 28-JAN-2002; 2002WO-US002455.
 XX
 PR 26-JAN-2001; 2001US-00771357.
 XX
 PA (UJYO) UNIV JOHNS HOPKINS SCHOOL MEDICINE.
 XX
 PI Sukumar S, Evron E, Dooley WC, Sacchi N, Davidson N, Fackler MJ;
 XX WPI; 2002-599803/64.
 DR
 XX
 XX Diagnosing and/or determining a predisposition to a cellular
 PT proliferative disorder of breast tissue, in particular breast cancer, by
 PT determining the state of methylation of one or more nucleic acids
 PT isolated from the subject.
 XX
 XX Disclosure; Fig 3B; 115pp; English.
 PS
 XX
 XX The present invention relates to a method of diagnosing a cellular
 CC proliferative disorder of breast tissue, which involves determining the
 CC state of methylation of one or more nucleic acids isolated from the
 CC subject, where the state of methylation of the nucleic acids as compared
 CC with a state of methylation from a subject not having the cellular
 CC proliferative disorder of breast tissue is indicative of a cellular
 CC proliferative disorder of breast tissue in the subject. The nucleic acids
 CC may be TWIST, HOXA5, NES-1, retinoic acid receptor beta (RARBeta),
 CC oestrogen receptor, cyclin D2, Wilms' tumour gene (WT-1), 14.3.3 sigma,
 CC HIN-1 or RASSF1A. The method is useful for diagnosing and/or determining
 CC a predisposition to a cellular proliferative disorder, in particular
 CC breast cancer including ductal carcinoma in situ, lobular carcinoma,
 CC colloid carcinoma, tubular carcinoma, medullary carcinoma, metaplastic
 CC carcinoma, intraductal carcinoma in situ, lobular carcinoma in situ and
 CC papillary carcinoma in situ. The present sequence is a primer used in the
 CC exemplification of the invention
 XX
 SQ Sequence 23 BP; 8 A; 6 C; 0 G; 9 T; 0 U; 0 Other;
 XX
 Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 7.1e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1681 AACTACATCTTCCCTGCTTACTC 1703
 |||||
 Db 1 AATTACATTTTCCAAACTTACTC 23
 |||||
 RESULT 529
 ABT06660
 ID ABT06660 standard; DNA; 23 BP.
 XX
 AC ABT06660;
 XX

DT 07-NOV-2002 (first entry)
 XX
 DE Nucleic acid detection and discrimination related oligo SEQ ID No 3.
 XX
 KW Hybridising; quantification; detection; synthesis; amplification;
 KW oligonucleotide; ds.
 XX
 OS Unidentified.
 XX
 PN WQ200257479-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 27-DEC-2001; 2001WO-US050460.
 XX
 PR 27-DEC-2000; 2000US-00748146.
 XX
 PR 23-OCT-2001; 2001US-0330468P.
 XX
 PA (INVI-) INVITROGEN CORP.
 XX
 XX Nazarenko I, Rashtchian A, Solus J, Pires RM, Darfler M;
 XX Gebeyehu G, Astatke M;
 PI
 XX WPI; 2002-627370/67.
 DR
 XX
 XX Composition comprising nucleic acid molecules and a oligonucleotide
 PT capable of hybridizing with a portion of nucleic acid, and comprises a
 PT modified nucleotide at or near the 3'-terminal nucleotide.
 XX
 XX Example 1; Page 115; 307pp; English.
 PS
 XX
 XX The invention relates to a composition comprising one or more nucleic
 CC acid molecules and at least one oligonucleotide, where at least a portion
 CC of the oligonucleotide is capable of hybridising with at least a portion
 CC of the nucleic acid molecule and where the oligonucleotide comprises a
 CC modified nucleotide at or near the 3'-terminal nucleotide. The various
 CC analogue oligonucleotides are useful for quantification or detection of
 CC one or more target nucleic acid molecules in a sample during nucleic acid
 CC synthesis or amplification. The analogues are also useful for determining
 CC the presence or absence of one or more particular nucleotides at a
 CC specific position or positions in a target nucleic acid molecule. The
 CC analogue oligonucleotides can also be useful for synthesising or
 CC amplifying one or more nucleic acid molecules, by mixing one or more
 CC nucleic acid templates or targets with the analogue oligonucleotides, and
 CC incubating the mixture to synthesise or amplify one or more nucleic acid
 CC molecules complementary to all or a portion of the templates or targets.
 CC This polynucleotide sequence represents a nucleic acid detection and
 CC discrimination related oligonucleotide of the invention
 XX
 SQ Sequence 23 BP; 7 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
 XX
 Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 7.1e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 945 GGCCTACTGCCACCGGAGAGG 967
 |||||
 Db 1 GGCTTACAGCCACCATGAGAGG 23
 |||||
 RESULT 530
 ACF05961
 ID ACF05961 standard; DNA; 23 BP.
 XX
 AC ACF05961;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 XX Beta-actin upstream PCR primer.
 DE
 XX Beta-actin; bone morphogenic protein; human; glaucoma; diagnosis;
 KW therapy; ophthalmological; PCR; primer; ss.
 KW
 XX

OS Homo sapiens.
 XX WO2003055443-A2.
 PN
 XX 10-JUL-2003.
 PD
 XX
 XX 31-OCT-2002; 2002WO-US035251.
 PF
 XX 31-OCT-2001; 2001US-0334852P.
 PR
 XX (ALCO-) ALCON INC.
 PA (UYNT-) UNIV NORTH TEXAS HEALTH SCI CENT.
 PA
 XX Clark AP, Wordinger RJ;
 PI WPI; 2003-559253/52.
 DR
 XX
 XX Diagnosing glaucoma in a sample comprises detecting altered expression of
 PT bone morphogenic proteins in sample from a cell or bodily fluid.
 PT
 XX Example 1; Page 25; 55pp; English.
 PS
 XX The present sequence is an upstream primer for the PCR amplification of
 CC the human beta-actin gene. RT-PCR was used to examine the expression of
 CC bone morphogenic protein (BMP) family genes in human trabecular meshwork
 CC and optic nerve head tissues. The invention provides methods for
 CC diagnosing glaucoma based on altered expression of BMPs. Also provided
 CC are methods for treating glaucoma and for identifying agents suitable for
 CC treatment of glaucoma
 XX
 SQ Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 7.1e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 506 AGGGCTACTGGAGAGCTGACC 528
 Db 1 AGGCCAACCGCGAAGATGACC 23
 RESULT 531
 ADD41388
 ID ADD41388 standard; DNA; 23 BP.
 AC ADD41388;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE Human DNA RT-PCR primer #11.
 XX
 XX Human; pulmonary fibrosis; renin-angiotensin-aldosterone;
 KW caspase enzyme inhibitor; endonuclease inhibitor;
 KW pulmonary epithelial cell apoptosis;
 KW non-thiol angiotensin activating enzyme inhibitor;
 KW non-thiol ACE inhibitor; sarcoidosis; silicosis; asbestosis;
 KW pneumoconiosis; hypersensitivity pneumonitis;
 KW drug-induced interstitial lung disease; ILD; vasculitides;
 KW histiocytosis X; Goodpasture's syndrome; chronic eosinophilic pneumonia;
 KW arrhythmia; RT-PCR; primer; ss; reverse transcriptase.
 XX
 OS Homo sapiens.
 XX
 XX US2003113330-A1.
 PN
 XX 19-JUN-2003.
 PD
 XX
 XX 06-JAN-2003; 2003US-00337169.
 PF
 XX 08-NOV-1999; 99US-0164052P.
 PR 08-NOV-2000; 2000US-00708742.
 PR
 XX (UHAL/) UHAL B D.
 PA

XX Uhal BD;
 PI WPI; 2003-810878/76.
 DR
 XX
 XX Treating pulmonary fibrosis by administering antagonist of renin-
 PT angiotensin-aldosterone system e.g. non-thiol angiotensin activating
 PT enzyme inhibitor, caspase enzyme or endonuclease inhibitor that inhibits
 PT apoptosis.
 XX
 PS Example 5; SEQ ID NO 17; 32pp; English.
 XX
 XX The invention relates to a method for treating pulmonary fibrosis
 CC involving administering to a subject at risk of or suffering from
 CC pulmonary fibrosis, an amount of an antagonist of a renin-angiotensin-
 CC aldosterone system e.g., a caspase enzyme inhibitor or an endonuclease
 CC inhibitor that inhibits pulmonary epithelial cell apoptosis, where the
 CC antagonist is a non-thiol angiotensin activating enzyme (ACE) inhibitor.
 CC The method is useful for treating a subject suffering from pulmonary
 CC fibrosis such as idiopathic pulmonary fibrosis, sarcoidosis, familial
 CC pulmonary fibrosis, silicosis, asbestosis, coal worker's pneumoconiosis,
 CC carbon pneumoconiosis, hypersensitivity pneumonitis, pulmonary fibrosis
 CC caused by inhalation of inorganic dust, pulmonary fibrosis caused by an
 CC infectious agent, pulmonary fibrosis caused by inhalation of noxious
 CC gases, aerosols, chemical dusts, fumes or vapours, or drug-induced
 CC interstitial lung disease (ILD). The method is also useful in treating a
 CC subject at risk of pulmonary fibrosis and undergoing radiation therapy or
 CC chemotherapy and in treating pulmonary fibrosis associated with collagen-
 CC vascular disorders or vasculitides, histiocytosis X, Goodpasture's
 CC syndrome, chronic eosinophilic pneumonia, idiopathic pulmonary
 CC haemosiderosis or arrhythmia. This sequence represents a reverse
 CC transcriptase PCR (RT-PCR) primer used in the method of the invention.
 XX
 SQ Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 7.1e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 506 AGGGCTACTGGAGAGCTGACC 528
 Db 1 AGGCCAACCGCGAAGATGACC 23
 RESULT 532
 ADM83762
 ID ADM83762 standard; DNA; 23 BP.
 AC ADM83762;
 XX
 DT 03-JUN-2004 (first entry)
 XX
 DE Human retinoic acid receptor beta 2 (RAR beta2) primer #18.
 XX
 KW cellular proliferative disorder; breast cancer; methylation;
 KW predisposition; PCR; primer; CpG island; ss; human;
 KW retinoic acid receptor beta 2; RAR beta2.
 XX
 OS Homo sapiens.
 XX
 XX US2003138783-A1.
 PN
 PD 24-JUL-2003.
 XX
 XX 28-JAN-2002; 2002US-00059579.
 PF
 XX 26-JAN-2001; 2001US-00771357.
 PR
 XX (SUKU/) SUKUMAR S.
 PA (EVRO/) EVRON E.
 PA (DOOL/) DOOLEY W C.
 PA (SACC/) SACCHI N.
 PA (DAVI/) DAVIDSON N.
 PA

CC rejection, e.g. cardiac or kidney transplant rejection, in an individual
 CC comprises detecting the expression level of one or more genes. The
 CC methods, system and kits are useful in diagnosing or monitoring
 CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
 CC islet, lung, bone marrow or stem cell transplant rejection.
 CC xenotransplant rejection or mechanical organ replacement rejection, in an
 CC individual. The method is also useful in assessing the immune status of
 CC an individual. The methods are also useful in diagnosing and monitoring
 CC diseases that involve the immune system, e.g. rheumatoid arthritis,
 CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
 CC viral, bacterial or fungal infection. The present sequence represents a
 CC primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
 CC of allograft rejection and other disorders.
 XX
 SQ Sequence 23 BP; 7 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 7.1e+02;
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1390 CTCACCAAGCTGTGCAGTTGA 1412
 || ||||| ||||| |||||
 Db 23 CTGACCAAGATGTTGATGTGA 1

RESULT 535
 AAA86682
 ID AAA86682 standard; DNA; 18 BP.
 AC AAA86682;
 XX
 DT 04-DEC-2000 (first entry)
 XX
 DE Cdc 2 kinase hammerhead ribozyme recogniton site #113.
 XX
 KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
 XX
 OS Mammalia.
 XX
 PN WO200032765-A2.
 XX
 PD 08-JUN-2000.
 XX
 PF 06-DEC-1999; 99WO-US028772.
 XX
 PR 04-DEC-1998; 98US-0110954P.
 XX
 PA (IMMU-) IMMUSOL INC.
 XX
 PI Tritz R, Welch PJ, Barber JR, Robbins JM;
 XX
 DR WPI; 2000-412314/35.
 XX
 PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
 PT PCNA and Cyclin B1.
 XX
 PS Example 1; Page 21; 109pp; English.
 XX

PI Tritz R, Welch PJ, Barber JR, Robbins JM;
 XX
 DR WPI; 2000-412314/35.
 XX
 PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
 PT PCNA and Cyclin B1.
 XX
 PS Example 1; Page 21; 109pp; English.
 XX
 CC The present invention relates to a hairpin or hammerhead ribozyme,
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment
 XX
 SQ Sequence 18 BP; 1 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 18;
 Best Local Similarity 88.9%; Pred. No. 6.2e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1030 GCTGACTTTGGCCTGGCC 1047
 ||||| ||||| |||||
 Db 1 GCTGATTTTGGCCTTGCC 18

RESULT 536
 AAA86680
 ID AAA86680 standard; DNA; 18 BP.
 XX
 AC AAA86680;
 XX
 DT 04-DEC-2000 (first entry)
 XX
 DE Cdc 2 kinase hammerhead ribozyme recogniton site #111.
 XX
 KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
 XX
 OS Mammalia.
 XX
 PN WO200032765-A2.
 XX
 PD 08-JUN-2000.
 XX
 PF 06-DEC-1999; 99WO-US028772.
 XX
 PR 04-DEC-1998; 98US-0110954P.
 XX
 PA (IMMU-) IMMUSOL INC.
 XX
 PI Tritz R, Welch PJ, Barber JR, Robbins JM;
 XX
 DR WPI; 2000-412314/35.
 XX
 PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
 PT PCNA and Cyclin B1.
 XX
 PS Example 1; Page 21; 109pp; English.
 XX

CC The present invention relates to a hairpin or hammerhead ribozyme,
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment
 XX
 SQ Sequence 18 BP; 1 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 18;
 Best Local Similarity 88.9%; Pred. No. 6.2e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCCTGG 1045
 ||||| ||||| |||||
 Db 1 TGGCTGATTTTGGCCTTG 18

RESULT 537
 AAA86681
 ID AAA86681 standard; DNA; 18 BP.
 XX
 AC AAA86681;
 XX
 DT 04-DEC-2000 (first entry)
 XX
 DE Cdc 2 kinase hammerhead ribozyme recogniton site #112.
 XX
 KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
 XX
 OS Mammalia.


```

DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX
PS Disclosure; Page 385; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiproliferative,
CC dermatological, cyclostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (II) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 18 BP; 1 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1028 TGGCTGACTTTGGCCTTG 1045
Db 1 TGGCTGATTTGGCCTTG 18
||||| |||||||
RESULT 542
ADE34621/C
ID ADE34621 standard; DNA; 18 BP.
XX
XX
AC ADE34621;
XX
XX 29-JAN-2004 (first entry)
XX
XX Human guanylate binding protein reverse primer #SEQ ID 14.
XX
XX Gene therapy; vaccine; rheumatoid arthritis; gene modulation; PCR;
XX primer; ss.
XX
XX Homo sapiens.
XX
XX WO2003048323-A2.
XX
XX 12-JUN-2003.
XX
XX 03-DEC-2002; 2002WO-US038461.
XX
XX 03-DEC-2001; 2001US-0337429P.
XX
XX (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX (CARM/) CARMAN J.
XX (NADL/) NADLER S G.
XX (BOWE/) BOWEN M.
XX (NEUB/) NEUBAUER M.
XX (LUPP/) LU P.
XX Carman J, Nadler SG, Bowen M, Neubauer M, Lu P;
XX WPI; 2003-513754/48.
XX
DR
XX
SQ Sequence 18 BP; 3 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1028 TGGCTGACTTTGGCCTTG 1045
Db 1 TGGCTGATTTGGCCTTG 18
||||| |||||||
RESULT 542
ADE34621/C
ID ADE34621 standard; DNA; 18 BP.
XX
XX
AC ADE34621;
XX
XX 29-JAN-2004 (first entry)
XX
XX Human guanylate binding protein reverse primer #SEQ ID 14.
XX
XX Gene therapy; vaccine; rheumatoid arthritis; gene modulation; PCR;
XX primer; ss.
XX
XX Homo sapiens.
XX
XX WO2003048323-A2.
XX
XX 12-JUN-2003.
XX
XX 03-DEC-2002; 2002WO-US038461.
XX
XX 03-DEC-2001; 2001US-0337429P.
XX
XX (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX (CARM/) CARMAN J.
XX (NADL/) NADLER S G.
XX (BOWE/) BOWEN M.
XX (NEUB/) NEUBAUER M.
XX (LUPP/) LU P.
XX Carman J, Nadler SG, Bowen M, Neubauer M, Lu P;
XX WPI; 2003-513754/48.
XX
DR
XX
SQ Sequence 18 BP; 5 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1207 TTTCGGGGCTCCACGGTG 1224
Db 18 TCTTGGGCTCCACGGTG 1
||||| |||||||
RESULT 543
ACA60586/C
ID ACA60586 standard; DNA; 18 BP.
XX
XX
AC ACA60586;
XX
XX 11-JUN-2003 (first entry)
XX
XX Antisense inhibition of human cyclin D2 related oligonucleotide #23.
XX
XX Human; cyclin D2; diagnostic; therapeutic; prophylaxis;
XX cyclin 2 inhibition; ss.
XX
XX Homo sapiens.
XX
XX US6492173-B1.
XX
XX 10-DEC-2002.
XX
XX 01-AUG-2001; 2001US-00920760.
XX
XX 01-AUG-2001; 2001US-00920760.
XX (ISIS-) ISIS PHARM INC.
XX
XX Cowsert LM;
XX
XX WPI; 2003-361492/34.
XX
XX Novel antisense compound useful for treating diseases associated with
XX Cyclin D2 expression, comprises an oligonucleotide comprising up to 50
XX nucleobases in length, which inhibits expression of Cyclin D2 in cells or
XX tissues in vitro.
XX
XX Example 15; Col 45-46; 40pp; English.
XX
XX The invention describes a compound (I) of up to 50 nucleobases in length,
XX which inhibits the expression of Cyclin D2. (I) is useful for inhibiting
XX the expression of Cyclin D2 in cells or tissues in vitro. (I) is thus
XX useful for treating disease associated with Cyclin D2 expression. (I) is
XX useful for diagnostics, therapeutics, prophylaxis and as research
XX reagents and kits. This sequence represents human cyclin D2 inhibition
XX associated oligonucleotide
XX
XX Sequence 18 BP; 3 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

```

```

PT Identifying a compound that modulates the activity of rheumatoid
PT arthritis-associated gene or protein by determining whether the test
PT compound modulates the activity of the gene or protein expressed in the
PT cell contacted with the compound.
XX
XX Disclosure; Page 24; 170pp; English.
XX
XX The invention relates to an assay for identifying a compound that
XX modulates the activity of a gene or protein associated with rheumatoid
XX arthritis. The method of the invention comprises providing a cell
XX expressing a gene or protein associated with rheumatoid arthritis,
XX contacting the cell with a test compound, and determining whether the
XX test compound modulates the activity of the gene or protein. The method
XX of the invention is useful for preparing a composition for treating
XX rheumatoid arthritis. The current sequence represents a PCR primer used
XX in the isolation of rheumatoid arthritis associated genes.
XX
SQ Sequence 18 BP; 5 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1207 TTTCGGGGCTCCACGGTG 1224
Db 18 TCTTGGGCTCCACGGTG 1
||||| |||||||
RESULT 543
ACA60586/C
ID ACA60586 standard; DNA; 18 BP.
XX
XX
AC ACA60586;
XX
XX 11-JUN-2003 (first entry)
XX
XX Antisense inhibition of human cyclin D2 related oligonucleotide #23.
XX
XX Human; cyclin D2; diagnostic; therapeutic; prophylaxis;
XX cyclin 2 inhibition; ss.
XX
XX Homo sapiens.
XX
XX US6492173-B1.
XX
XX 10-DEC-2002.
XX
XX 01-AUG-2001; 2001US-00920760.
XX
XX 01-AUG-2001; 2001US-00920760.
XX (ISIS-) ISIS PHARM INC.
XX
XX Cowsert LM;
XX
XX WPI; 2003-361492/34.
XX
XX Novel antisense compound useful for treating diseases associated with
XX Cyclin D2 expression, comprises an oligonucleotide comprising up to 50
XX nucleobases in length, which inhibits expression of Cyclin D2 in cells or
XX tissues in vitro.
XX
XX Example 15; Col 45-46; 40pp; English.
XX
XX The invention describes a compound (I) of up to 50 nucleobases in length,
XX which inhibits the expression of Cyclin D2. (I) is useful for inhibiting
XX the expression of Cyclin D2 in cells or tissues in vitro. (I) is thus
XX useful for treating disease associated with Cyclin D2 expression. (I) is
XX useful for diagnostics, therapeutics, prophylaxis and as research
XX reagents and kits. This sequence represents human cyclin D2 inhibition
XX associated oligonucleotide
XX
XX Sequence 18 BP; 3 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

```

Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 992 AGAACCTGCTCATCAACG 1009
|||||
DB 18 AGAACCTGCTCACCATCG 1

RESULT 544

ADM92997
ID ADM92997 standard; DNA; 18 BP.

XX AC

XX AC

XX ADM92997;

DT 03-JUN-2004 (first entry)

DE SNP-containing cardiovascular associated gene primer #328.

XX SNP; single nucleotide polymorphism; cardiovascular associated gene;
KW allelic variation; atherosclerosis; ischemia; reperfusion; hypertension;
KW restenosis; arterial inflammation; myocardial infarction; stroke; primer;
KW ss.

XX OS Homo sapiens.

XX PN WO2003057911-A2.

XX PD 17-JUL-2003.

XX PF 07-JAN-2003; 2003WO-BP000060.

XX PR 08-JAN-2002; 2002EP-00000153.

XX PA (FARB) BAYER AG.

XX PI Stropp U, Schwes S, Kallabis H;

XX WPI; 2003-577532/54.

XX New isolated polynucleotides comprising single nucleotide polymorphisms
PT of the cardiovascular gene, useful for assessing predisposition or
PT susceptibility to a cardiovascular disease, e.g. atherosclerosis,
PT restenosis or stroke.

XX Disclosure; Page 81; 187pp; English.

CC The invention relates an isolated polynucleotide (I) encoded by a
CC cardiovascular associated (CA) gene, having allelic variation contained
CC in a functional surrounding like full length cDNA for CA gene
CC polypeptide, and with or without the CA gene promoter sequence. (I) is a
CC polynucleotide comprising single nucleotide polymorphisms predicting
CC cardiovascular disease. The polynucleotides are useful for assessing
CC predisposition or susceptibility to a cardiovascular disease, e.g.
CC atherosclerosis, ischemia/reperfusion, hypertension, restenosis, arterial
CC inflammation, myocardial infarction, and stroke. These may also be used
CC to predict personal medication schemes omitting adverse drug reactions,
CC or as probes for detecting genetic polymorphisms and as templates for the
CC recombinant production of normal or variant peptides/polypeptides encoded
CC by the genes. This sequence corresponds to a PCR primer to amplify one of
CC the genes of the invention.

SQ Sequence 18 BP; 6 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1258 GGAAACCCCACTGAGGAG 1275
|||||
DB 1 GGAAAGCCCACTGAGGAG 18

RESULT 545

AD017024/c
ID AD017024 standard; DNA; 18 BP.

XX AC

XX AC

XX AD017024;

DT 01-JUL-2004 (first entry)

DE Human LIPIN3 exon1 PCR primer seqid 16.

XX LIPIN3; obesity; obesity-related disorder; differential expression;

KW polynucleotide polymorphism; adipocyte; human; PCR; primer; ss.

XX OS Homo sapiens.

XX PN US2004018497-A1.

XX PD 29-JAN-2004.

XX PF 26-JUL-2002; 2002US-00206618.

XX PR 26-JUL-2002; 2002US-00206618.

XX PA (WARD/) WARDEN C H.

XX PI Warden CH;

XX WPI; 2004-122019/12.

XX Novel isolated LIPIN3 polypeptide, useful for diagnosing diabetes.

XX Example 5; SEQ ID NO 15; 58pp; English.

CC The invention describes an isolated polypeptide (I) comprising a
CC polypeptide having a fully defined LIPIN3 sequence (S1) of 806 amino
CC acids as given in the specification or a region consisting of 5 or more
CC contiguous amino acids, where the region includes amino acid of 634 of
CC (S1). Also described are: an isolated polynucleotide (II) comprising a
CC fully defined sequence (S2) of 2405 base pair as given in the
CC specification, or its complement, a polynucleotide that selectively
CC hybridizes to (S2) relative to a known polynucleotide, or a region of 15
CC or more contiguous nucleotides, the region comprising nucleotide 1904 of
CC (S2); vector, preferably an expression vector (III) comprising (II); a
CC host cell (IV) comprising (II); detecting (MI) differential expression of
CC a LIPIN3 polynucleotide in a test sample; detecting obesity or obesity-
CC related disorders associated with differential expression of a LIPIN3
CC polynucleotide comprising a detecting a level of expression of (V), or
CC (VI), or a region of (V) or (VI), where the region is 10 or more
CC nucleotides in length; screening (M2) for agents that reduce the
CC expression of a (II) in a test cell sample; antibodies that specifically
CC bind to (I); a recombinant cell comprising a recombinantly modified (II),
CC such that the (II) is overexpressed; a composition comprising (I); an
CC array comprising two or more (II); and identifying an alteration in
CC LIPIN3 gene associated with obesity or an obesity related disorder. (II)
CC is useful for detecting a polynucleotide polymorphism associated with
CC obesity. (II) is useful for diagnosing obesity an obesity-related
CC disorder which involves detecting (I). In (M2), the cell is an adipocyte.
CC The test agent is chosen from antibody, protein, nucleic acid, and small
CC organic molecule. This sequence represents a primer used to identify
CC single nucleotide polymorphisms in the human LIPIN3 gene that may be
CC associated with obesity.

SQ Sequence 18 BP; 4 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1016 GAGAGCTCAAGCTGGCTG 1033
|||||
DB 18 GAGTGTCTAGGTGGCTG 1

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RESULT 546
AAA82999
ID AAA82999 standard; DNA; 19 BP.
XX
XX AAA82999;
AC
XX 04-DEC-2000 (first entry)
DT
XX cdk6 ribozyme binding site #59.
DE
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
OS
XX WO200032765-A2.
PN
XX 08-JUN-2000.
PD
XX 06-DEC-1999; 99WO-US028772.
PF
XX 04-DEC-1998; 98US-0110954P.
PR
XX (IMMU-) IMMUSOL INC.
PA
XX Tritz R, Welch PJ, Barber JR, Robbins JW;
PI
XX WPI; 2000-412314/35.
DR
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.
PT
XX Disclosure; Page 49; 109pp; English.
PS
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Tritz R, Welch PJ, Barber JR, Robbins JW;
PI
XX WPI; 2000-412314/35.
DR
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.
PT
XX Disclosure; Page 55; 109pp; English.
PS
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.5e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1030 GCTGACTTTGGCCTGGCC 1047
DB 2 GCTGACTTCGGCCTTGCC 19
RESULT 547
AAA82619
ID AAA82619 standard; DNA; 19 BP.
XX
XX AAA82619;
AC
XX 04-DEC-2000 (first entry)
DT
XX cdk2 ribozyme binding site #56.
DE
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
OS
XX WO200032765-A2.
PN
XX 08-JUN-2000.
PD
XX 06-DEC-1999; 99WO-US028772.
PF
XX 04-DEC-1998; 98US-0110954P.
PR
XX (IMMU-) IMMUSOL INC.
PA
XX Tritz R, Welch PJ, Barber JR, Robbins JW;
PI
XX WPI; 2000-412314/35.
DR
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.
PT
XX Disclosure; Page 74; 109pp; English.
PS
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC

```

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PF 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
PA
XX Tritz R, Welch PJ, Barber JR, Robbins JW;
PI
XX WPI; 2000-412314/35.
DR
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.
PT
XX Disclosure; Page 49; 109pp; English.
PS
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.5e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 927 CCAGCTGCTCGTGGCCT 944
DB 1 CCAGCTGCTCCAGGGCCT 18
RESULT 548
AAA84266
ID AAA84266 standard; DNA; 19 BP.
XX
XX AAA84266;
AC
XX 04-DEC-2000 (first entry)
DT
XX Cyclin D1 ribozyme binding site #33.
DE
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
OS
XX WO200032765-A2.
PN
XX 08-JUN-2000.
PD
XX 06-DEC-1999; 99WO-US028772.
PF
XX 04-DEC-1998; 98US-0110954P.
PR
XX (IMMU-) IMMUSOL INC.
PA
XX Tritz R, Welch PJ, Barber JR, Robbins JW;
PI
XX WPI; 2000-412314/35.
DR
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.
PT
XX Disclosure; Page 74; 109pp; English.
PS
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC

```

CC Representative examples of ribozyme recognition sites are given in
 CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment

XX Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 6.5e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 272 GTGCTGCTCTCTGGGAAC 289
 | ||||| ||||| |||||
 Db 2 GAGCTGCTCTCTGCTGAAC 19

RESULT 549
 AAH58161
 ID AAH58161 standard; DNA; 19 BP.
 XX AC AAH58161;
 XX DT 10-SEP-2001 (first entry)
 XX DE Cell-cycle dependent kinase cdk6 ribozyme binding site SEQ ID NO:585.
 XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
 KW recognition site; target; ribozyme binding site; eye disease; vulnery;
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytosatic;
 KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
 KW antickling; ophthalmological; keratolytic; gene therapy; viral wart;
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
 KW basal cell carcinoma; seborrhic wart; vitreoretinopathy; scar;
 KW sickle cell retinopathy; ss.

XX Homo sapiens.
 OS Synthetic.
 XX WO200130362-A2.
 XX 03-MAY-2001.
 XX 26-OCT-2000; 2000WO-US029500.
 XX 26-OCT-1999; 99US-0161532P.
 XX (IMMU-) IMMUSOL INC.
 XX Robbins JM, Tritz R;
 XX WPI; 2001-300427/31.
 XX DR Treating proliferative skin or eye diseases and scarring, using ribozymes
 PT that cleave RNA encoding cytokines involved in inflammation, matrix
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.
 XX Example 1; Page 114; 408pp; English.

XX The present invention describes a method for treating a proliferative
 CC skin or eye disease and scarring. The method involves administering a
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
 CC dependent kinase, growth factor or a reductase, or administering a
 CC nucleic acid molecule (II) comprising a promoter operably linked to a
 CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
 CC dermatological, cytosatic, antiseborrheic, antidiabetic, antickling,
 CC ophthalmological, vulnery, keratolytic and virucide activities, and
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,

CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
 CC also be used for treating proliferative eye diseases such as diabetic
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
 CC prematurity and retinal detachment, and for treating and preventing
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
 CC scar. AAH57577 to AAH62099 represent sequences used in the
 CC exemplification of the present invention

SQ Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 6.5e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1030 GCTGACTTGGCCTGGCC 1047
 | ||||| ||||| |||||
 Db 2 GCTGACTTCGGCCTTGCC 19

RESULT 550
 AAH59428
 ID AAH59428 standard; DNA; 19 BP.
 XX AC AAH59428;
 XX DT 10-SEP-2001 (first entry)
 XX DE Cyclin D1 ribozyme binding site SEQ ID NO:1852.
 XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
 KW recognition site; target; ribozyme binding site; eye disease; vulnery;
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytosatic;
 KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
 KW antickling; ophthalmological; keratolytic; gene therapy; viral wart;
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
 KW basal cell carcinoma; seborrhic wart; vitreoretinopathy; scar;
 KW sickle cell retinopathy; ss.

XX Homo sapiens.
 OS Synthetic.
 XX WO200130362-A2.
 XX 03-MAY-2001.
 XX 26-OCT-2000; 2000WO-US029500.
 XX 26-OCT-1999; 99US-0161532P.
 XX (IMMU-) IMMUSOL INC.
 XX Robbins JM, Tritz R;
 XX WPI; 2001-300427/31.
 XX DR Treating proliferative skin or eye diseases and scarring, using ribozymes
 PT that cleave RNA encoding cytokines involved in inflammation, matrix
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.
 XX Example 1; Page 206; 408pp; English.

XX The present invention describes a method for treating a proliferative
 CC skin or eye disease and scarring. The method involves administering a
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
 CC dependent kinase, growth factor or a reductase, or administering a
 CC nucleic acid molecule (II) comprising a promoter operably linked to a
 CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
 CC dermatological, cytosatic, antiseborrheic, antidiabetic, antickling,
 CC ophthalmological, vulnery, keratolytic and virucide activities, and
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used

CC in gene therapy. (I) and (II) are useful for treating proliferative skin
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
 CC also be used for treating proliferative eye diseases such as diabetic
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
 CC prematurity and retinal detachment, and for treating and preventing
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
 CC scar. AAH57577 to AAH62099 represent sequences used in the
 CC exemplification of the present invention
 XX
 SQ Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 6.5e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 272 GTGCTGCTCTCGGGGAAC 289
 Db 2 GAGCTGCTCTCGGTGAAC 19
 RESULT 551
 AAH57781
 ID AAH57781 standard; DNA; 19 BP.
 XX
 AC AAH57781;
 XX
 DT 10-SEP-2001 (first entry)
 XX
 DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:205.
 XX
 KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
 KW recognition site; target; ribozyme binding site; eye disease; vulnary;
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
 KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
 KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
 KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
 KW sickle cell retinopathy; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FN WO200130362-A2.
 XX
 PD 03-MAY-2001.
 XX
 PF 26-OCT-2000; 2000WO-US029500.
 XX
 PR 26-OCT-1999; 99US-0161532P.
 XX
 PA (IMMU-) IMMUSOL INC.
 XX
 PI Robbins JM, Tritz R;
 XX
 DR WPI; 2001-300427/31.
 XX
 XX Treating proliferative skin or eye diseases and scarring, using ribozymes
 PT that cleave RNA encoding cytokines involved in inflammation, matrix
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.
 XX
 XX Example 1; Page 86; 408pp; English.
 PS
 CC The present invention describes a method for treating a proliferative
 CC skin or eye disease and scarring. The method involves administering a
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
 CC dependent kinase, growth factor or a reductase, or administering a
 CC nucleic acid molecule (II) comprising a promoter operably linked to a
 CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,

CC ophthalmological, vulnary, keratolytic and virucide activities, and
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
 CC also be used for treating proliferative eye diseases such as diabetic
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
 CC prematurity and retinal detachment, and for treating and preventing
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
 CC scar. AAH57577 to AAH62099 represent sequences used in the
 CC exemplification of the present invention
 XX
 SQ Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 6.5e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 927 CCAGCTGCTCCGTGGCCT 944
 Db 1 CCAGCTGCTCCAGGGCCT 18
 RESULT 552
 ADF31689
 ID ADF31689 standard; RNA; 19 BP.
 XX
 AC ADF31689;
 XX
 DT 12-FEB-2004 (first entry)
 XX
 DE Human IGF-1R siRNA lower strand, SEQ ID NO:354.
 XX
 KW RNA interference; short interfering nucleic acid; siRNA;
 KW short interfering RNA; siRNA; expression modulation; gene therapy;
 KW short hairpin RNA; shRNA; therapeutic target identification;
 KW drug screening; diagnosis; gene function analysis; gene mapping; cancer;
 KW pharmacogenomics; gene function analysis; polycystic kidney disease;
 KW proliferative disease; restenosis; autoimmune disease;
 KW inflammatory disease; allergic disease; autoimmune disease;
 KW transplant rejection; cytostatic; vasotrophic; nephrotropic;
 KW antiinflammatory; antiallergic; immunosuppressive; human;
 KW insulin-like growth factor 1 receptor; IGF-1R; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO2003070911-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 20-FEB-2003; 2003WO-US005044.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX Mcswiggen J, Beigelman L, Chowrira B;
 XX
 XX WPI; 2003-721691/68.
 DR
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of the insulin-like growth
 PT factor-1 receptor gene.
 XX
 PS Example 3; SEQ ID NO 354; 147pp; English.
 XX
 CC The invention relates to short interfering nucleic acids (siNA) which

CC downregulate expression of the human insulin-like growth factor 1
 CC receptor (IGF-1R) gene by RNA interference. The siNAs may or may not
 CC comprise ribonucleotides and may be double or single stranded. They
 CC further comprise sense and antisense regions, or alternatively are
 CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
 CC Specifically, the siNAs include short interfering RNA (siRNA), double-
 CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
 CC can be unmodified or chemically modified, can contain
 CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
 CC vector or enzymatically synthesised. The invention also relates to kits
 CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
 CC of siNA; and vectors that express siNA. The siNAs are used to modulate
 CC expression of the IGF-1R gene in cells, tissue explants or organisms
 CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the
 CC treatment of a variety of conditions. They may be used for treating
 CC cancer and other proliferative diseases (e.g., restenosis and polycystic
 CC kidney disease), inflammatory and/or allergic diseases, autoimmune
 CC diseases and transplant rejection. The siNAs are also useful for drug
 CC screening, diagnosis, therapeutic target identification and validation,
 CC genetic engineering, pharmacogenomics, studying gene function, and gene
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
 CC represents the lower strand of a human IGF-1R-targeted double-stranded
 CC siNA.
 CC
 CC Sequence 19 BP; 5 A; 5 C; 2 G; 0 T; 7 U; 0 Other;
 XX
 SQ
 Query Match 0.8%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 55.6%; Pred. No. 6.5e+02;
 Matches 10; Conservative 6; Mismatches 2; Indels 0; Gaps 0;
 QY 1681 AACTACATCTTCCTGCT 1698
 || :|||: :|||:|:
 DB 2 AAGUACAUUUCCUGCU 19
 RESULT 553
 ADF31412/c
 ID ADF31412 standard; RNA; 19 BP.
 XX
 AC ADF31412;
 XX
 DT 12-FEB-2004 (first entry)
 XX
 DE Human IGF-1R transcript target sequence/siNA upper strand, SEQ ID NO:77.
 XX
 KW RNA interference; short interfering nucleic acid; siNA;
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;
 KW drug screening; diagnosis; therapeutic target identification;
 KW pharmacogenomics; gene function analysis; gene mapping; cancer;
 KW proliferative disease; restenosis; polycystic kidney disease;
 KW inflammatory disease; allergic disease; autoimmune disease;
 KW transplant rejection; cytostatic; vasotropic; nephrotropic;
 KW antiinflammatory; antiallergic; immunosuppressive; human;
 KW insulin-like growth factor 1 receptor; IGF-1R; target sequence; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2003070911-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 20-FEB-2003; 2003WO-US0050544.
 XX
 PR 20-FEB-2002; 2002US-0358560P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.

XX
 PI McSwiggen J, Beigelman L, Chowrira B;
 XX WPI; 2003-721691/68.
 XX
 PT New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of the insulin-like growth
 PT factor-1 receptor gene.
 XX
 PS Example 3; SEQ ID NO 77; 147pp; English.
 XX
 CC The invention relates to short interfering nucleic acids (siNA) which
 CC downregulate expression of the human insulin-like growth factor 1
 CC receptor (IGF-1R) gene by RNA interference. The siNAs may or may not
 CC comprise ribonucleotides and may be double or single stranded. They
 CC further comprise sense and antisense regions, or alternatively are
 CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
 CC Specifically, the siNAs include short interfering RNA (siRNA), double-
 CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
 CC can be unmodified or chemically modified, can contain
 CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
 CC vector or enzymatically synthesised. The invention also relates to kits
 CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
 CC of siNA; and vectors that express siNA. The siNAs are used to modulate
 CC expression of the IGF-1R gene in cells, tissue explants or organisms
 CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the
 CC treatment of a variety of conditions. They may be used for treating
 CC cancer and other proliferative diseases (e.g., restenosis and polycystic
 CC kidney disease), inflammatory and/or allergic diseases, autoimmune
 CC diseases and transplant rejection. The siNAs are also useful for drug
 CC screening, diagnosis, therapeutic target identification and validation,
 CC genetic engineering, pharmacogenomics, studying gene function, and gene
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
 CC represents the upper strand of a human IGF-1R-targeted double-stranded
 CC siNA, which is identical to the IGF-1R transcript target sequence.
 CC
 CC Sequence 19 BP; 7 A; 2 C; 5 G; 0 T; 5 U; 0 Other;
 XX
 SQ
 Query Match 0.8%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 6.5e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1681 AACTACATCTTCCTGCT 1698
 || :|||: :|||:|:
 DB 18 AAGTACATTTTCCTGCT 1
 RESULT 554
 ADF85015
 ID ADF85015 standard; RNA; 19 BP.
 XX
 AC ADF85015;
 XX
 DT 26-FEB-2004 (first entry)
 XX
 DE Human ERG2-targeted siRNA - SEQ ID 1309.
 XX
 KW short interfering nucleic acid; siNA; breakpoint cluster region;
 KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
 KW cytostatic; leukaemia; lymphoma; human; ss; siRNA; ERG2;
 KW v-ets erythroblastosis virus E26 oncogene like (avian).
 XX
 OS Homo sapiens.
 XX
 PN WO2003070972-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 20-FEB-2003; 2003WO-US005234.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.

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PR 15-AUG-2002; 2002US-0404039P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 14-JAN-2003; 2003US-0439922P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX PA
XX Mcswiggen J, Beigelman L, Chowrira B;
XX PI
XX WPI; 2003-679889/64.
XX DR
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
XX and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX cluster region-Abelson (BCR-ABL) gene.
XX
XX Example 7; SEQ ID NO 1309; 197pp; English.
XX
XX The invention relates to a novel double-stranded short interfering
XX nucleic acid (siNA) that downregulates expression of the breakpoint
XX cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
XX (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
XX activity and may be useful for modulating expression of the BCR-ABL gene,
XX as well as for treating leukaemia or lymphoma and in diagnosis, drug
XX screening, target identification and validation, genetic engineering,
XX gene function studies and gene mapping. The current sequence is that of
XX the human ERG2 (v-ets erythroblastosis virus E26 oncogene like (avian))-
XX targeted siRNA of the invention.
XX
XX Sequence 19 BP; 1 A; 10 C; 5 G; 0 T; 3 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 19;
Best Local Similarity 72.2%; Pred. No. 6.5e+02;
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
Qy 556 CTCAGCCGCCGCCCTCCGT 573
Db 2 CUCAGCCGCCGCCUCCGU 19
:|||||:|||||
RESULT 555
ID ADF85191/C
XX ADF85191 standard; RNA; 19 BP.
XX AC
XX ADF85191;
XX
XX 26-FEB-2004 (first entry)
XX DT
XX Human ERG2-targeted siRNA - SEQ ID 1485.
XX DE
XX short interfering nucleic acid; siNA; breakpoint cluster region;
XX v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
XX cytostatic; leukaemia; lymphoma; human; ss; siRNA; ERG2;
XX v-ets erythroblastosis virus E26 oncogene like (avian).
XX KW
XX Homo sapiens.
XX OS
XX WO2003070972-A2.
XX FN
XX 28-AUG-2003.
XX PD
XX
XX 20-FEB-2003; 2003WO-US005234.
XX PF
XX
XX 20-FEB-2002; 2002US-0358580P.
XX PR
XX 11-MAR-2002; 2002US-0363124P.
XX PR
XX 06-JUN-2002; 2002US-0386782P.
XX PR
XX 15-AUG-2002; 2002US-0404039P.
XX PR
XX 29-AUG-2002; 2002US-0406784P.
XX PR
XX 05-SEP-2002; 2002US-0408378P.
XX PR
XX 09-SEP-2002; 2002US-0409293P.
XX PR
XX 14-JAN-2003; 2003US-0439922P.
XX PR
XX 15-JAN-2003; 2003US-0440129P.
XX PR

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```

XX (RIBO-) RIBOZYME PHARM INC.
XX PA
XX Mcswiggen J, Beigelman L, Chowrira B;
XX PI
XX WPI; 2003-679889/64.
XX DR
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
XX and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX cluster region-Abelson (BCR-ABL) gene.
XX
XX Example 7; SEQ ID NO 1485; 197pp; English.
XX
XX The invention relates to a novel double-stranded short interfering
XX nucleic acid (siNA) that downregulates expression of the breakpoint
XX cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
XX (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
XX activity and may be useful for modulating expression of the BCR-ABL gene,
XX as well as for treating leukaemia or lymphoma and in diagnosis, drug
XX screening, target identification and validation, genetic engineering,
XX gene function studies and gene mapping. The current sequence is that of
XX the human ERG2 (v-ets erythroblastosis virus E26 oncogene like (avian))-
XX targeted siRNA of the invention.
XX
XX Sequence 19 BP; 3 A; 5 C; 10 G; 0 T; 1 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.5e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 556 CTCAGCCGCCGCCCTCCGT 573
Db 18 CTCAGCCGCCGCCCTCCGT 1
:|||||:|||||
RESULT 556
AD079637
ID AD079637 standard; DNA; 19 BP.
XX AC
XX AD079637;
XX
XX 26-AUG-2004 (first entry)
XX DT
XX KIAA0783 extend primer #29.
XX DE
XX Cytostatic; Gene therapy; breast cancer; human; DLG1; KIAA0783; DPP3;
XX CENPC1; SNP; single nucleotide polymorphism; PHF14;
XX PHD finger protein 14; chromosome 7p21.3; zinc finger protein;
XX transcription factor; extend; primer; ss.
XX KW
XX Homo sapiens.
XX OS
XX WO2004047514-A2.
XX FN
XX 10-JUN-2004.
XX PD
XX
XX 25-NOV-2003; 2003WO-US037943.
XX PF
XX
XX 25-NOV-2002; 2002US-0429136P.
XX PR
XX 24-JUL-2003; 2003US-0490234P.
XX PR
XX
XX (SEQU-) SEQUENOM INC.
XX PA
XX Roch RB, Nelson MR, Braun A, Kammerer SM, Reneland R;
XX PI
XX WPI; 2004-441037/41.
XX DR
XX
XX Identifying a subject at risk of breast cancer by detecting the presence
XX of polymorphic variations in the DLG1, KIAA0783, DPP3 or CENPC1 regions
XX which are associated with breast cancer in a nucleic acid sample from a
XX subject.
XX PT
XX
XX Example 4; Page 78; 227pp; English.
XX PS

```

XX The present invention relates to a method for identifying a subject at
 CC risk of breast cancer. The method comprising detecting the presence or
 CC absence of one or more polymorphic variations associated with breast
 CC cancer in a nucleic acid sample from a subject. The nucleic acid sample
 CC comprises the DLGI region (ADO79402), KIAA0783 region (ADO79403), DPF3
 CC region (ADO79404) or CENPC1 region (ADO79405). The gene DLGI (discs,
 CC large homolog 1 (Drosophila)) is also known as synapse-associated protein
 CC 97, hdlg or SAP97. DLGI has been mapped to chromosomal position 3q29. The
 CC gene KIAA0783 is also known as PHF14 and PHD finger protein 14. KIAA0783
 CC has been mapped to chromosomal position 7p21.3. The KIAA0783 protein is a
 CC novel gene with unknown function, however, being a zinc finger protein,
 CC it likely to be a transcription factor. The gene DPF3 (D4, zinc and
 CC double PHD fingers, family 3) is also known as CERD4, cer-d4, FLJ14079
 CC and 2810403B03Rik. DPF3 is a Rho family guanine-nucleotide exchange
 CC factor. DPF3 has been mapped to chromosomal position 14q24.3-q31.1. The
 CC gene CENPC1 (centromere protein C1) is also known as Centromere
 CC autoantigen C1. CENPC1 has been mapped to chromosomal position 4q12-
 CC q13.3. CENPC1 is a centromere autoantigen and a component of the inner
 CC kinetochore plate. The CENPC1 protein is required for maintaining proper
 CC kinetochore size and a timely transition to anaphase. The method is
 CC useful for identifying a subject at risk of breast cancer, for early
 CC diagnosis, prevention and treatment of breast cancer, to analyze and
 CC predict a response to a breast cancer treatment, and in clinical drug
 CC trials. The present sequence was used in an example from the invention.
 XX
 SQ Sequence 19 BP; 10 A; 3 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 6.5e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 663 CAAAGCGCAAAGCAAGCT 680
 |||||
 DB 2 CAAAGCAAAGTAAGCT 19
 |||||
 RESULT 557
 AAV12449/C
 ID AAV12449 standard; DNA; 20 BP.
 XX
 AC AAV12449;
 XX
 DT 14-MAY-1998 (first entry)
 DE Growth hormone receptor PCR primer P3.
 XX
 KW Growth hormone receptor; GHR; human; insulin like growth factor-1;
 KW partial growth hormone insensitivity syndrome; IGF-1; short stature;
 KW PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FN WO9741887-A1.
 XX
 PD 13-NOV-1997.
 XX
 PF 18-APR-1997; 97WO-US0066652.
 XX
 PR 03-MAY-1996; 96US-00643212.
 XX
 PA (GETH) GENENTECH INC.
 XX
 PI Attie KM, Carlsson LMS, Gesundheit N, Goddard A;
 XX WPI; 1997-558693/51.
 DR
 XX Treatment of partial growth hormone insensitivity syndrome - with growth
 PT hormone or insulin-like growth factor.
 XX
 PS Disclosure; Page 7; 133pp; English.
 XX

CC The present sequence represents a PCR primer for growth hormone receptor
 CC (GHR) used in an example of the present invention. The present invention
 CC describes new methods for increasing the growth rate of a human patient
 CC having partial growth hormone insensitivity syndrome (GHIS) or a non-
 CC Growth Hormone (GH)-deficient short stature but not Laron Syndrome; the
 CC patient has a height of at least -2 standard deviations (SD) below normal
 CC for age and sex, has a serum level of high-affinity GH-binding protein of
 CC at least 2 SD below normal, has serum levels of insulin-like growth
 CC factor (IGF)-I below normal mean levels and has a mean level or maximum
 CC stimulated serum level of GH that is at least normal, and growth rate is
 CC increased by administering an effective amount of GH and/or IGF-I. The
 CC methods are used to treat people with short stature including familial
 CC short stature, constitutional delay or growth or idiopathic short
 CC stature. The patient especially has a heterologous intra- or
 CC extracellular GH receptor gene defect
 XX
 SQ Sequence 20 BP; 8 A; 1 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 6.8e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1237 CACTTCATCTTCCGTATC 1254
 |||||
 DB 19 CACTTCATATCCTTATC 2
 |||||
 RESULT 558
 AAV52681/C
 ID AAV52681 standard; DNA; 20 BP.
 XX
 AC AAV52681;
 XX
 DT 21-DEC-1998 (first entry)
 DE Hepatocyte nuclear factor 4 alpha gene exon 8 forward PCR primer.
 XX
 KW Hepatocyte nuclear factor 4 alpha; HNF-4 alpha; MODY1; human;
 KW transcription factor; maturity onset diabetes of the young; TCF14;
 KW diabetes; NIDDM; diagnosis; therapy; PCR; primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FN WO9811254-A1.
 XX
 PD 19-MAR-1998.
 XX
 PF 10-SEP-1997; 97WO-US016037.
 XX
 PR 10-SEP-1996; 96US-0025719P.
 PR 02-OCT-1996; 96US-0028056P.
 PR 30-OCT-1996; 96US-0029679P.
 XX
 PA (ARCH-) ARCH DEV CORP.
 XX
 PI Bell GI, Yamagata K, Oda N, Kaisaki PJ, Furuta H, Menzel S;
 PI Horikawa Y;
 XX
 WPI; 1998-271667/24.
 XX
 PT Isolated nucleic acid encoding hepatocyte nuclear factor 1-alpha and 1-
 PT beta - useful for detecting susceptibility for non-insulin dependent
 PT diabetes, especially maturity-onset diabetes of the young.
 XX
 PS Example 3; Page 112; 363pp; English.
 XX
 CC This is a forward PCR primer designed for use with a reverse primer (see
 CC AAV52682) in the PCR amplification of exon 8 and the flanking introns
 CC (see AAV52656) of the human hepatocyte nuclear factor-4 alpha (HNF-4
 CC alpha) gene (see AAV52687). Mutations of the HNF-4 alpha gene have been
 CC identified by amplifying (see AAV52665-86) and sequencing the appropriate
 CC exon. The invention concerns the identification of genes responsible for

CC non-insulin dependent diabetes mellitus (NIDDM) for use in diagnostics
 CC and therapeutics. It demonstrates that the MODY1 (maturity-onset diabetes
 CC of the young) locus is the HNF-4 alpha gene. Analysis of mutations in the
 CC HNF-4 alpha gene can be diagnostic for diabetes

XX
 SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 6.8e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 691 CTTGTGCACTCAAGGAG 708
 Db 18 CTTGTGTCACACAGGAG 1

RESULT 559

AAZ01841
 ID AAZ01841 standard; DNA; 20 BP.

XX
 AC AAZ01841;

XX 07-OCT-1999 (first entry)

XX PCR primer used to amplify an ORF of Chlamydia trachomatis.

XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
 KW paratrachoma; inclusion conjunctivitis; genital disease; perinephritis;
 KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
 KW Bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.

XX Synthetic.

OS Chlamydia trachomatis.

OS WO9928475-A2.

XX 10-JUN-1999.

XX 27-NOV-1998; 98WO-IB001939.

XX 28-NOV-1997; 97FR-00015041.

PR 17-DEC-1997; 97FR-00016034.

XX 04-NOV-1998; 98US-0107077P.

XX (GEST) GENSET.

XX Griffais R;

XX WPI; 1999-371125/31.

XX Genome sequence of Chlamydia trachomatis.

PS Disclosure; Page 1476; 1755pp; English.

XX PCR primers AAZ01426-206209 were used to amplify open reading frames
 CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
 CC encode polypeptides (see AAY36754-Y37945) which can be used as vaccines
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
 CC be used to control growth of the microorganism. Chlamydia trachomatis is
 CC responsible for a large number of diseases, e.g. eye diseases such as
 CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
 CC conjunctivitis; genital diseases such as nongonococcal urethritis;
 CC epididymitis, cervicitis, salpingitis, perinephritis, Bartholinitis;
 CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
 CC The polypeptides of the invention may be of use in treating these
 CC diseases

XX Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 6.8e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 856 AAGGACCTGAAGCAGTAC 873
 Db 3 AAGGACCTGAAGAGTTC 20

RESULT 560
 AAX79768/c

ID AAX79768 standard; DNA; 20 BP.

XX AAX79768;

XX 17-AUG-1999 (first entry)

XX PCR primer H11791 for mitochondrial DNA analysis.

XX PCR primer; human; mitochondrial DNA; genetic diagnosis;

XX adult disease contraction; ss.

OS Synthetic.

OS Homo sapiens.

XX JP11113597-A.

XX 27-APR-1999.

XX 13-OCT-1997; 97JP-00279127.

XX 13-OCT-1997; 97JP-00279127.

XX (TANA/) TANAKA M.

XX WPI; 1999-320841/27.

XX Genetic diagnosis using human mitochondrial DNA - comprises detecting

XX base replacements.

XX Example 2; Page 6; 15pp; Japanese.

XX This sequence represents a PCR primer that can be used in the method of
 CC the invention. The method is for genetic diagnosis using human
 CC mitochondrial DNA where there is at least one base replacement from among
 CC the following five replacements: the 3010th base is changed from guanine
 CC to adenine; the 4883rd base from cytosine to thymine; the 5178th base
 CC from cytosine to adenine; the 8414th base from cytosine to thymine; and
 CC the 14668th base from cytosine to thymine. The method can be used for
 CC diagnosing the probability of contracting adult diseases. A confirmation
 CC of base replacement can give a diagnosis of the level of probability of
 CC contraction of adult diseases

XX Sequence 20 BP; 5 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 6.8e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 766 CTCAGGACCTCAAAACAC 783
 Db 18 CTCAGGACCTCAAACTC 1

RESULT 561

AAX23550/c

ID AAX23550 standard; DNA; 20 BP.

XX AAX23550;

XX 18-JUN-1999 (first entry)

XX Deletion sequence oligonucleotide 3.

XX Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;
 KW probe; cellular adhesion modulator; cellular proliferation modulator;
 KW human retrovirus; human immunodeficiency virus; non-human retrovirus;


```
PR 08-APR-1999; 99US-00288461.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Karas JG;
XX
XX WPI; 2000-619223/59.
XX
XX New antisense compound for inhibiting the expression of signal transducer
XX and activator of transcription 3 (STAT3) in cells or tissues and treating
XX diseases or condition associated with STAT3, such as rheumatoid arthritis
XX and cancer.
XX
XX Example 2; Page 46; 104pp; English.
XX
XX The present invention describes an antisense compound (I), 8 to 30
XX nucleobases in length, that is targeted to a nucleic acid molecule
XX encoding STAT3 (Signal Transducer and Activator of Transcription) and
XX which inhibits the expression of it. (I) has antiinflammatory,
XX antirheumatic, cytostatic and immunostimulatory activities. (I) is used
XX for inhibiting the expression of STAT3 in cells or tissues, treating an
XX animal having a disease or condition associated with STAT3 or a human
XX having a disease or condition characterised by a reduction in apoptosis,
XX and inducing apoptosis in a cell. Diseases or conditions that are treated
XX are rheumatoid arthritis, cancer of the breast, prostate, brain, head
XX and/or neck, leukaemia, myeloma, melanoma or lymphoma. (I) can also be
XX used for diagnostic methods in detecting and determining the role of
XX STAT3 in various cell functions, physiological processes and conditions
XX and for diagnosing the conditions associated with expression of STAT3.
XX (I) can be used alone or with other drugs as an immunostimulator. (I) is
XX used in sandwich and colourimetric assays, involving enzyme conjugation
XX and radiolabeling and is used in diagnostic kits. AAC93150 encodes human
XX STAT3 and AAC93231 encodes mouse STAT3 as given in the exemplification of
XX the present invention. AAC93151 to AAC93230 and AAC93232 to AAC93299
XX represent STAT3 phosphorothioate antisense oligonucleotides, and AAC93300
XX represents a mismatch control oligonucleotide which are used in example
XX from the present invention
XX
XX Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 922 CTGTTCCAGCTGCTCCGT 939
DB 2 CTGTTCCAGCTGCTGCAT 19
RESULT 564
AAF32480/C
ID AAF32480 standard; DNA; 20 BP.
XX
XX AAF32480;
AC
XX
XX 19-APR-2001 (first entry)
XX
XX 1,5-anhydroglucitol dehydrogenase PCR primer SEQ ID NO:24.
XX
XX Agrobacterium tumefaciens NT1130; 1,5-anhydroglucitol dehydrogenase;
XX 1,5-AGDH; detection; diabetes; PCR primer; ss.
XX
XX Agrobacterium tumefaciens.
XX
XX JP20000316570-A.
XX
XX 21-NOV-2000.
XX
XX 13-MAY-1999; 99JP-00133157.
XX
XX 13-MAY-1999; 99JP-00133157.
XX
XX (DAII-) DAIICHI KAKAGU YAKUIN KK.
XX
XX WPI; 2001-128253/14.
XX
XX A gene encoding 1,5-anhydroglucitol dehydrogenase, a recombinant vector
XX containing the gene, a transformant containing the recombinant vector and
XX a recombinant 1,5-anhydroglucitol dehydrogenase protein prepared from the
XX transformant.
XX
XX Example 2; Page 17; 22pp; Japanese.
XX
XX The present invention describes the 1,5-anhydroglucitol dehydrogenase
XX protein (1,5-AGDH) isolated from Agrobacterium tumefaciens. The 1,5-AGDH
XX protein is useful as a detecting reagent for early stage diabetes. The
XX present sequence represents a PCR primer for 1,5-AGDH, which is used in
XX an example from the present invention
XX
XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 365 AGAGTGACCGCTTCAG 382
DB 19 AGAGTGACCGACTTGAG 2
RESULT 565
AAI66452/C
ID AAI66452 standard; DNA; 20 BP.
XX
XX AAI66452;
AC
XX
XX 04-DEC-2001 (first entry)
XX
XX Human NADH ubiquinone oxidoreductase 20KD subunit cDNA PCR primer #2.
XX
XX Human; NADH ubiquinone oxidoreductase 20KD subunit; BionADH20; cancer;
XX nervous system disease; retrograde disease; gene therapy; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX CN1302870-A.
XX
XX 11-JUL-2001.
XX
XX 02-NOV-1999; 99CN-00119947.
XX
XX 02-NOV-1999; 99CN-00119947.
XX
XX (SHEN-) SHENGYUAN GENE DEV CO LTD SHANGHAI.
XX
XX Mao Y, Xie Y;
XX
XX WPI; 2001-550584/62.
XX
XX New human NADH ubiquinone oxido-reductase 20KD subunit for treating
XX retrograde diseases in the nervous system and cancer.
XX
XX Example 3; Page 12(Disclosure); 21pp; Chinese.
XX
XX The present invention provides the protein and coding sequences of human
XX NADH ubiquinone oxidoreductase 20KD subunit, designated BionADH20. The
XX sequences can be used in the treatment of cancer and retrograde diseases
XX in the nervous system. The present sequence is a PCR primer for the
XX coding sequence of the invention
XX
XX Sequence 20 BP; 3 A; 5 C; 12 G; 0 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 365 AGAGTGACCGCTTCAG 382
DB 19 AGAGTGACCGACTTGAG 2
```

QY 554 CCTCAGCCGCCGCTCC 571
 ||||| |||||
 Db 20 CCTCGGCTGCCGCTCC 3

RESULT 566

AAS96793
 ID AAS96793 standard; DNA; 20 BP.

XX AC AAS96793;

XX DT 26-FEB-2002 (first entry)

XX DE Human STAT3 antisense phosphorothioate oligodeoxynucleotide #56.

XX KW STAT3; human; signal transducer and activator of transcription; ss; STAT;
 KW antisense gene therapy; Fas-mediated apoptosis; inflammatory disease;
 KW autoimmune disease; rheumatoid arthritis; cancer; breast; prostate; head;
 KW neck; brain; leukaemia; myeloma; melanoma; lymphoma; apoptosis;
 KW antiinflammatory; immunosuppressive; antirheumatic; antiarthritic;
 KW cytostatic.

XX OS Homo sapiens.

XX OS Synthetic.

XX PN US2001029250-A1.

XX PD 11-OCT-2001.

XX PF 11-JAN-2001; 2001US-00758881.

XX PR 08-APR-1999; 99US-00288461.

XX PR 06-APR-2000; 2000WO-US009054.

XX PA (KARR/) KARRAS J G.

XX PI Karras JG;

XX DR WPI; 2002-009991/01.

XX PT Novel antisense compound useful for treating and diagnosing inflammatory
 PT diseases and cancers, is targeted to a nucleic acid molecule encoding
 PT signal transducer and activator of transcription proteins.

XX PS Example 2; Page 13; 21pp; English.

XX CC The invention relates to antisense compounds targeted to a nucleic acid
 CC molecule encoding a signal transducer and activator of transcription
 CC (STAT) protein, specifically STAT3, where the antisense compounds inhibit
 CC the expression of STAT3. The antisense sequences are useful for
 CC inhibiting the expression of STAT3 in cells or tissues, inducing Fas-
 CC mediated apoptosis in cells, and sensitising cells to apoptosis. They are
 CC also useful for treating an animal having a disease or condition
 CC associated with STAT3. These disorders include inflammatory or autoimmune
 CC disease, particularly rheumatoid arthritis, cancers, such as those of the
 CC breast, prostate, brain and head and neck and leukaemias, myelomas,
 CC melanomas and lymphomas. Also treatable are human diseases or conditions
 CC characterised by a reduction in apoptosis or an insensitivity to
 CC apoptotic signals. The sequences of the invention can be used in clinical
 CC research, for detecting and determining the role of STAT3 in various cell
 CC functions and physiological processes and for diagnosing conditions
 CC associated with the expression of STAT3. The sequences represent cDNA
 CC encoding human STAT3 and human STAT3 oligonucleotides

XX SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 6.8e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 922 CTGTTCCAGCTGCTCGT 939

||||| |||||

Db 2 CTGTTCCAGCTGCTGCAT 19

RESULT 567

ABL45558

ID ABL45558 standard; DNA; 20 BP.

XX AC ABL45558;

XX DT 11-APR-2002 (first entry)

XX DE Human chromosome 21q22.1 PCR primer SEQ ID NO:2602.

XX KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
 KW PCR primer; ss.

XX OS Homo sapiens.

XX PN JP2001321190-A.

XX PD 20-NOV-2001.

XX PF 12-MAR-2001; 2001JP-00068285.

XX PR 10-MAR-2000; 2000JP-00066716.

XX PA (RIKA) RIKAGAKU KENKYUSHO.

XX PA (GENO-) GENOTEX YG.

XX DR WPI; 2002-144136/19.

XX XX Arraying genome clones.

XX PS Claim 6; Page 56; 528pp; Japanese.

XX CC The present invention describes a method of arraying genome clones. The
 CC method comprises: (a) clones of the genomic libraries contained in
 CC multiwell plates numbered for discrimination are mixed in each of the
 CC multiwell plates; (b) a primer designed based on the chromosome marker
 CC sequence is added to the mixture to carry out an amplification reaction;
 CC (c) a signal corresponding to the marker is detected from the resultant
 CC amplified product to specify the discrimination Nos. of the multiwell
 CC plates containing the clones having said marker sequence; (d) the order
 CC of the markers is changed so that the same discrimination Nos. succeed to
 CC the maximum in the specified discrimination Nos. to array the multiwell
 CC plates; (e) the clones in the multiwell plates of the specified
 CC discrimination Nos. are mixed respectively in each wells of longitudinal
 CC and lateral directions; (f) the mixed clones are cultured and the
 CC resultant cultures are amplified by using the above primer; (g) signals
 CC are detected from the amplified products; (h) the clones in the multiwell
 CC plates are specified from the detected result; and (i) the clones are
 CC reconstituted as the positions on the chromosome and arrayed. The
 CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
 CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
 CC represent PCR primers for human chromosome 21q22.1, which are
 CC specifically claimed for use in the present invention

XX SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 6.8e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1416 TCGAATCGGATCTCCG 1433

||||| |||||

Db 2 TCGAATCGGATCTCAGC 19

RESULT 568

AAD35074

ID AAD35074 standard; DNA; 20 BP.

XX AC AAD35074;

XX XX

DT 25-JUL-2002 (first entry)
XX Human Stat3 antisense oligonucleotide #8.
DE
XX Human; signal transducer and activator of transcription 3; ischaemia;
KW immune response; Stat3; coronary atherosclerosis; vascular occlusion;
KW hypoxia; stroke; angiogenesis; myocardial infarction; hypoglycaemia;
KW inflammation; chronic obstructive pulmonary disease; cardiac arrest;
KW insulin dependent diabetes mellitus; emphysema; trauma; scleroderma;
KW shock; chronic active hepatitis; adult respiratory distress syndrome;
KW nitrogen necrosis; proliferative angiopathy; autoimmune thyroiditis;
KW Sjogren's syndrome; multiple sclerosis; Addison's disease; epilepsy;
KW polymyositis; rheumatoid arthritis; autoimmune infertility; anaemia;
KW proliferative disease; Grave's disease; ulcerative colitis; sarcoma;
KW carcinoma; degenerative disorder; gene therapy; growth deficiency;
KW carcinosis; hypoproliferative disorder; lesion; antisense; ss.
XX
XX Homo sapiens.
XX
XX W0200220032-A1.
XX
XX 14-MAR-2002.
XX
XX 10-SEP-2001; 2001WO-US028254.
XX
XX 08-SEP-2000; 2000US-0231212P.
XX
XX (UYJO) UNIV JOHNS HOPKINS.
XX (UYSF-) UNIV SOUTH FLORIDA.
XX
XX Yu H, Pardoll D, Jove R, Dalton W;
XX WPI; 2002-362218/39.
XX
XX Modulating angiogenesis and an immune response in an individual, for
XX treating a hypoxic or ischemic condition, comprises administering a
XX compound that modulates the activity of a signal transducer and activator
XX of transcription 3.
XX
XX Disclosure; Page 32; 94pp; English.
XX
XX The invention relates to a method of modulating angiogenesis and immune
XX response. Method involves administering to an individual a compound that
XX modulate the activity of signal transducer and activator of transcription
XX 3 (Stat3). Modulating angiogenesis is useful for treating or preventing
XX hypoxic or ischaemic condition or disorder which is the result of stroke,
XX ischaemia, coronary atherosclerosis, myocardial infarction, inflammation,
XX tissue ischaemia in the lower extremities, infarction, trauma, vascular
XX occlusion, prenatal or postnatal oxygen deprivation, suffocation, shock,
XX chronic obstructive pulmonary disease, choking, asphyxia, hypoglycaemia,
XX epilepsy, emphysema, adult respiratory distress syndrome, cardiac arrest,
XX nitrogen necrosis, proliferative angiopathy e.g. diabetic microangiopathy
XX with neovascularisation. Suppressing an immune response is useful for
XX ameliorating a symptom of an autoimmune disease such as systemic lupus
XX erythematosus, multiple sclerosis, insulin dependent diabetes mellitus,
XX Sjogren's syndrome, scleroderma, polymyositis, chronic active hepatitis,
XX mixed connective tissue disease, primary biliary cirrhosis, pernicious
XX anaemia, autoimmune thyroiditis, idiopathic Addison's disease, vitiligo,
XX gluten-sensitive enteropathy, autoimmune neuropenia, myasthenia gravis,
XX idiopathic thrombocytopenia purpura, Grave's disease, Goodpasture's
XX disease, rheumatoid arthritis, cirrhosis, pemphigus vulgaris, autoimmune
XX infertility, bullous pemphigoid, discoid lupus, ulcerative colitis and
XX dense deposit disease. The method is useful in preventing or treating
XX specific proliferative and oncogenic disease which includes sarcomas and
XX carcinomas e.g.; bladder carcinoma, colon carcinoma, chronic leukaemia,
XX fibrosarcoma, liposarcoma, degenerative disorders, growth deficiency,
XX hypoproliferative disorders, physical trauma, lesions and wounds. The
XX method is also used in gene therapy. The present sequence is human Stat3
XX antisense oligonucleotide
XX
XX Query Match 0.8%; Score 14.8; DB 1; Length 20;
XX Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 922 CTGTTCCAGCTGCTCCGT 939
Db 2 CTGTTCCAGCTGCTGCAT 19
RESULT 569
ABX09073/C
ID ABX09073 standard; DNA; 20 BP.
XX AC ABX09073;
XX 22-JAN-2003 (first entry)
XX Human dual specific phosphatase 5 phosphorothioate oligonucleotide #12.
XX Human; dual specific phosphatase 5; ss; developmental disorder;
KW hyperproliferative disorder; inflammatory disorder aberrant apoptosis;
KW antiinflammatory; cytostatic; antiapoptotic; antiproliferative;
KW phosphorothioate oligonucleotide.
XX
XX Homo sapiens.
XX Synthetic.
XX W0200297108-A2.
XX 05-DEC-2002.
XX 15-MAY-2002; 2002WO-US015305.
XX 25-MAY-2001; 2001US-00865993.
XX (ISIS-) ISIS PHARM INC.
XX Monia BP, Watt AT;
XX WPI; 2003-041418/03.
XX
XX Antisense modulation of dual specific phosphatase 5 expression used in
XX treating disorders e.g. inflammatory diseases.
XX
XX Example 15; Page 84; 110pp; English.
XX
XX The invention relates to a compound 8-50 nucleobases in length targeted
XX to a nucleic acid molecule encoding dual specific phosphatase 5, where
XX the compound specifically hybridises with and inhibits the expression of
XX dual specific phosphatase 5. The compound is used for treating an animal
XX having a disease or condition associated with dual specific phosphatase 5
XX such as a hyperproliferative disorder, a developmental disorder, an
XX inflammatory disorder or a disease which arises from aberrant apoptosis.
XX Sequences ABX09062-ABX09139 represent human dual specific phosphatase 5
XX phosphorothioate oligonucleotides of the invention
XX
XX Query Match 0.8%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 6.8e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 953 GCCACCGGACAGAGGTGC 970
Db 19 GCCACTGGCAGAGGTGC 2
RESULT 570
ACC69706
ID ACC69706 standard; DNA; 20 BP.
XX AC ACC69706;
XX 21-JUL-2003 (first entry)


```

Db      18  AGCAAGCTCTCAGCCAC 1
      |||||
RESULT 572
ACF39677/c
ID  ACF39677 standard; DNA; 20 BP.
XX
AC  ACF39677;
XX
DT  29-SEP-2003 (first entry)
XX
DE  MHC class II transactivator antisense oligonucleotide SEQ ID NO:80.
XX
KW  Human; major histocompatibility complex class II transactivator;
KW  MHC class II transactivator; antisense modulation; immunosuppressive;
KW  antimicrobial; antidiabetic; antirheumatic; antiarthritic; cytostatic;
KW  neurotropic; neuroprotective; immunostimulant; autoimmune disorder;
KW  MHC Class II transactivator inhibitor; infection; transplant rejection;
KW  diabetes; rheumatoid arthritis; cancer; Alzheimer's disease;
KW  multiple sclerosis; severe combined immunodeficiency disease;
KW  phosphorothioate; antisense oligonucleotide; ss.
XX
OS  Homo sapiens.
OS  Synthetic.
XX
PH  Key Location/Qualifiers
FT  modified_base 1..20
FT  /*tag= a
FT  /mod_base= OTHER
FT  /note= "phosphorothioate linkages; all cytidine residues
FT  are 5-methylcytidines"
FT  modified_base 1..5
FT  /*tag= b
FT  /mod_base= OTHER
FT  /note= "2'-O-methoxyethyls"
FT  modified_base 16..20
FT  /*tag= c
FT  /mod_base= OTHER
FT  /note= "2'-O-methoxyethyls"
XX
PN  WO2003050247-A2.
XX
XX  19-JUN-2003.
XX
XX  04-DEC-2002; 2002WO-US038616.
XX
XX  05-DEC-2001; 2001US-00006366.
XX  (ISIS-) ISIS PHARM INC.
XX  Bennett PC, Dobie KW;
XX  WPI; 2003-577294/54.
XX
XX  New antisense oligonucleotides for modulating MHC class II transactivator
XX  gene expression, particularly useful for treating autoimmune disorders
XX  such as transplant rejection, Alzheimer's disease, or multiple sclerosis,
XX  or infection.
XX
XX  Example 15; Page 84; 129pp; English.
XX
XX  The present invention describes a compound (I) that is 8-50 nucleobases
XX  in length: (a) targets a nucleic acid molecule encoding major
XX  histocompatibility complex (MHC) class II transactivator, and
XX  specifically hybridises with the nucleic acid encoding the MHC class II
XX  transactivator; and (b) specifically hybridises with at least an 8-
XX  nucleobase portion of an active site on a nucleic acid molecule encoding
XX  MHC class II transactivator. (I) has immunosuppressive, antimicrobial,
XX  antidiabetic, antirheumatic, antiarthritic, cytostatic, neurotropic,
XX  neuroprotective and immunostimulant activities, and can be used as an MHC
XX  Class II transactivator inhibitor. The MHC class II transactivator

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CC  antisense oligonucleotides can be used for treating an animal having a
CC  disease or condition associated with MHC class II transactivator, e.g.
CC  autoimmune disorder or infection. The antisense oligonucleotides can be
CC  used for inhibiting the expression of MHC class II transactivator in
CC  cells or tissues. In particular, these diseases include transplant
CC  rejection, diabetes, rheumatoid arthritis, cancer, Alzheimer's disease,
CC  multiple sclerosis, or severe combined immunodeficiency disease. The
CC  antisense compounds are useful for diagnostics, prophylaxis, or as
CC  research reagents or kits. The present sequence represents a human MHC
CC  class II transactivator chimeric phosphorothioate antisense
CC  oligonucleotide, which is used in an example from the present invention
XX
XX  Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
XX
XX  Query Match 0.8%; Score 14.8; DB 1; Length 20;
XX  Best Local Similarity 88.9%; Pred. No. 6.8e+02;
XX  Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Qy  1567 CCTGACTCAGGCGGCCA 1584
Db  |||||
    19 CCTGACTCAGGCGACTCA 2
XX
RESULT 573
ADC98368/c
ID  ADC98368 standard; DNA; 20 BP.
XX
XX  ADC98368;
AC  ADC98368;
XX
DT  01-JAN-2004 (first entry)
XX
DE  IGF503 polymorphism marker PCR primer B primer seq.
XX
KW  low bone mineral density; BMD; bone damage; polymorphism; osteoporosis;
XX  single nucleotide polymorphism; SNP; PCR primer; ss; human.
XX
OS  Synthetic.
OS  Homo sapiens.
XX
XX  WO20030504218-A2.
XX
XX  03-JUL-2003.
XX
XX  19-DEC-2002; 2002WO-US040948.
XX
XX  20-DEC-2001; 2001US-0342711P.
XX  04-NOV-2002; 2002US-0423559P.
XX
XX  (INCY-) INCYTE GENOMICS INC.
XX
XX  Jones KA, Valdes A, Townley DJ, Mangion J, Galwey N, Bennett S;
XX  McKay I, Schafer A;
XX  WPI; 2003-559156/52.
XX
XX  Determining whether an individual is predisposed to susceptibility to low
XX  bone mineral density (BMD) and/or bone damage, involves identifying
XX  polymorphisms in associated genes.
XX
XX  Example 8; Page 237; 246pp; English.
XX
XX  The present invention describes a method of determining whether an
XX  individual is predisposed to susceptibility to low bone mineral density
XX  (BMD) and/or bone damage comprising identifying whether the individual
XX  has at least one polymorphism in a polynucleotide encoding a protein,
XX  where the polynucleotide is one of 81 200-500 nucleotide sequences (S1,
XX  see ABC98235 to ADC98315). An agent identified in an method from the
XX  present invention which can be used for the prevention or treatment of a
XX  disease resulting in susceptibility to low BMD and/or bone damage is
XX  useful in the manufacture of a medicament for use in modulating the
XX  susceptibility to low BMD and/or bone damage. The disease associated with
XX  low BMD and/or bone damage is osteoporosis. The present PCR primer
XX  sequence is used in the exemplification of the present invention.

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XX SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 311 TCAGCTCTGCACCCAGAGA 328
||| ||||| |||||
Db 18 TCATCTCGCACCCTGAGA 1
RESULT 574
ADE28924
ID ADE28924 standard; DNA; 20 BP.
XX AC ADE28924;
XX DT 29-JAN-2004 (first entry)
XX DE Forward Ag5335 RT-PCR primer used to amplify human NOV RNA.
XX KW NOVX; antidiabetic; anorectic; cardiant; hypotensive;
KW antiarteriosclerotic; virucide; antibacterial; fungicide; protozoacide;
KW nootropic; neuroprotective; antiparkinsonian; anticonvulsant;
KW osteopathic; antiarthritic; antiinflammatory; dermatological;
KW antiasthmatic; antilipaemic; metabolic; diabetes; obesity; infectious;
KW anorexia; cancer; cardiovascular; hypertension; atherosclerosis;
KW neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy; immune;
KW osteoarthritis; haemopoietic; inflammatory skin; asthma; dyslipidaemia;
KW neurogenesis; cell differentiation; proliferation; haemopoiesis;
KW wound healing; angiogenesis; gene therapy; chromosome mapping;
KW tissue typing; human; NOV; PCR; primer; ss; RT-PCR.
XX OS Homo sapiens.
XX WO2003040330-A2.
XX PD 15-MAY-2003.
XX PF 05-NOV-2002; 2002WO-US035536.
XX PR 05-NOV-2001; 2001US-0338626P.
XX PR 05-DEC-2001; 2001US-0336600P.
XX PR 07-DEC-2001; 2001US-0338285P.
XX PR 12-DEC-2001; 2001US-0341346P.
XX PR 17-DEC-2001; 2001US-0341477P.
XX PR 17-DEC-2001; 2001US-0341540P.
XX PR 20-DEC-2001; 2001US-0342592P.
XX PR 27-DEC-2001; 2001US-0344297P.
XX PR 31-DEC-2001; 2001US-0344903P.
XX PR 17-APR-2002; 2002US-0373288P.
XX PR 15-MAY-2002; 2002US-0380981P.
XX PR 17-MAY-2002; 2002US-0381495P.
XX PR 28-MAY-2002; 2002US-0383534P.
XX PR 28-MAY-2002; 2002US-0383744P.
XX PR 29-MAY-2002; 2002US-0383829P.
XX PR 29-MAY-2002; 2002US-0384024P.
XX PR 07-AUG-2002; 2002US-0401788P.
XX PR 26-AUG-2002; 2002US-0406353P.
XX PR 31-OCT-2002; 2002US-00287971.
XX PA (CURA-) CURAGEN CORP.
XX PI Alsobrook JP, Alvarez E, Anderson DW, Baron M, Boldog FL;
PI Burgess CE, Casman SJ, Chapoval A, Dhanabal M, Edinger SR, Eisen A;
PI Ellerman K, Ettenberg S, Gangolli EA, Gerlach VL, Gorman L;
PI Grosse WM, Guo X, Hackett C, Ji W, Kekuda R, Khramtsov NV;
PI Lepley PM, Li L, Macdougall JR, Malyankar UM, Mazur A, McQueeney K;
PI Mezes PS, Miller CE, Millett I, Mishra VS, Padigar M, Patturajan M;
PI Pena CE, Feyman JA, Starling G, Spytek KA, Stone DJ, Tchernev N;
PI Smithson G, Starling G, Rieger DK, Shenoy SG, Shimkets RA;
PI Vernet CAM, Zerhusen BD, Zhong M;
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XX WPI; 2003-441555/41.
XX New isolated NOVX polypeptides and polynucleotides, useful for
PT preventing, diagnosing or treating NOVX-associated disorders, e.g.
PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
PT asthma, or infections.
XX Example C; SEQ ID NO 301; 447pp; English.
XX The invention relates to a novel isolated NOVX polypeptide. The
CC polypeptide of the invention demonstrates, antidiabetic, anorectic,
CC cardiant, hypotensive, antiarteriosclerotic, virucide, antibacterial,
CC fungicide, protozoacide, nootropic, neuroprotective, antiparkinsonian,
CC anticonvulsant, osteopathic, antiarthritic, antiinflammatory,
CC dermatological, antiasthmatic and antilipaemic activities. The
CC polypeptides, nucleic acid molecules and antibodies may be useful for
CC treating or diagnosing diseases including metabolic disorders such as
CC diabetes and obesity, infectious diseases, anorexia, cancer,
CC cardiovascular diseases including hypertension and atherosclerosis,
CC neurodegenerative disorders such as Alzheimer's disease, Parkinson's
CC disease and epilepsy, immune disorders e.g. osteoarthritis, haemopoietic
CC disorders, inflammatory skin disorders, asthma and dyslipidaemia.
CC Furthermore, the nucleic acids and polypeptides may also be used to
CC identify molecules that modulate or inhibit neurogenesis, cell
CC differentiation and proliferation, haemopoiesis, wound healing and
CC angiogenesis, as well as in gene therapy. Finally, the nucleic acids may
CC be used as hybridisation probes, in chromosome mapping, tissue typing,
CC preventive medicine and pharmacogenomics. The current sequence is that of
CC the RT-PCR primer which was used within the exemplification of the
CC invention.
XX SQ Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1530 GCTACAAAGGAGGCCAG 1547
||||| ||||| |||||
Db 1 GCTACAAAGGAGGCCAG 18
RESULT 575
ADH93653
ID ADH93653 standard; DNA; 20 BP.
XX AC ADH93653;
XX DT 22-APR-2004 (first entry)
XX DE Human gene PCR primer #498.
XX KW human; gene sequence; single nucleotide polymorphism; SNP;
XX KW disease diagnosis; ss; PCR; primer.
XX OS Homo sapiens.
XX JN JP2003174893-A.
XX PD 24-JUN-2003.
XX PF 11-DEC-2001; 2001JP-00377637.
XX PR 11-DEC-2001; 2001JP-00377637.
XX PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX WPI; 2003-819215/77.
XX Polynucleotide for detecting single nucleotide polymorphisms existing in
PT human gene, contains isolated human gene having specified sequence.
XX
```

PS Claim 2; SEQ ID NO 1490; 529pp; Japanese.

XX The invention comprises isolated human gene sequences and PCR primer

CC sequences which can be used to detect single nucleotide polymorphisms

CC (SNPs). The DNA sequences of the invention are useful for detecting SNPs

CC existing in human genes and for the diagnosis of human disease. The

CC present DNA sequence represents a human gene PCR primer of the invention.

XX

SQ Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. NO. 6.8e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 923 TGTTCACGCTGCTCGTG 940

|||||

Db 3 TGTTCACGCTGCTCCTG 20

RESULT 576

ABZ93374/C

ID ABZ93374 standard; DNA; 20 BP.

XX AC ABZ93374;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

DE Human; antisense; lung dysfunction; nasal airway dysfunction;

XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW anisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS

XX WO200295308-A2.

PN 31-OCT-2002.

PD 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPITG-) EPIGENESTS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

DR

XX Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiquinone.

XX

PS Disclosure; SEQ ID NO 8616; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiasthmatic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

of, or reducing sensitivity to adenosine, reducing levels of adenosine

receptor, producing bronchodilation, increasing levels of ubiquinone or

lung surfactant in a subject's tissue, or treating bronchoconstriction,

lung inflammation, lung allergies, or a respiratory disease or condition.

Note: The sequence data for this patent is not represented in the printed

specification, but was obtained in electronic format directly from WIPO

at ftp.wipo.int/pub/published_pct_sequences

Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. NO. 6.8e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1291 CTGTCCACGAGGAGGTTTC 1308

|||||

Db 20 CCGTCCATCGAGGAGTTC 3

RESULT 577

ADM65705/C

ID ADM65705 standard; DNA; 20 BP.

XX AC ADM65705;

XX 03-JUN-2004 (first entry)

XX NRY polymorphism detection primer #576.

DE ethnic origin determination; polymorphic site determination;

XX Y chromosome; paternity testing; forensic; diagnosis;

KW non-recombining region; human; NRY; PCR; primer; ss.

XX Homo sapiens.

OS

XX US2003134285-A1.

PN 17-JUL-2003.

XX 01-NOV-2001; 2001US-00002623.

XX 01-NOV-2000; 2000US-0245355P.

XX (OEFN/) OEFNER P J.

XX (UNDE/) UNDERHILL P A.

XX Oefner PJ, Underhill PA;

PI WPI; 2003-843259/78.

DR

XX Determining the ethnic origin of a male by obtaining a nucleic acid

PT sample from the male and identifying at least two polymorphic markers in

PT the nucleic acid sample indicative of the ethnic origin of the male.

XX

Claim 24; Page 62; 74pp; English.

XX The invention describes a method of determining the ethnic origin of a

CC male comprising obtaining a nucleic acid sample from the male, and

CC identifying at least two polymorphic markers in the nucleic acid sample

CC indicative of the ethnic origin of the male, using at least one primer

CC pair from the primer pairs given in the specification. Also described is

CC a method of: identifying polymorphic sites in a nucleic acid; a kit for

CC determining the ethnic origin of an individual; determining the ethnic

CC origin of a human male individual; an isolated nucleic acid segment of a

CC human Y chromosome comprising at least 10 contiguous bases including at

CC least one of the polymorphic sites given in the specification; nucleic

CC acid primer pairs for amplifying polymorphic regions of the Y chromosome

CC given in the specification; and determining the paternity of a human male

CC individual. The method is useful for determining the ethnic origin of a

CC male, for paternity testing, for forensic studies or for diagnosis. This

CC sequence represents a primer used to detect polymorphisms in the non-

CC recombining region of the human Y chromosome (NRY).

XX

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SQ Sequence 20 BP; 1 A; 4 C; 8 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1063 CCAACAAAGACATACCTC 1080
Db 19 CCAACAAAGCCAGACTCC 2
RESULT 578
ABD29604/c
ID ABD29604 standard; DNA; 20 BP.
AC ABD29604;
XX
XX
XX
XX 29-JUL-2004 (first entry)
XX H86812-derived oligonucleotide SEQ ID 8616.
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093059/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX PT oligonucleotide containing less percentage of adenosine, targeted to
XX PT nucleic acids associated with lung airway or lung dysfunction, and
XX PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 8616; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX CC bronchoconstriction, respiratory tract inflammation, allergies and
XX CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX CC surfactant depletion or hyposecretion, when administered to a mammal. The
XX CC oligonucleotides are derived from a gene encoding or regulating
XX CC expression of a target polypeptide associated with lung airway or lung
XX CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX CC The invention also describes a kit, that comprises: (a) a delivery
XX CC device, in separate containers, (b) the oligonucleotides, (c)
XX CC instructions for adding a carrier and for use of the kit. The composition
XX CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
XX CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX CC beta-adrenergic agonist. The composition is useful for preventing or
XX CC treating a respiratory, lung or malignant disease. The administered
XX CC composition comprises oligo and is administered to reduce the production
XX CC or availability, or to increase the degradation of the target mRNA or to
XX CC reduce the amount of target polypeptide present in the lungs. The
XX CC pulmonary obstruction, and/or bronchoconstriction and/or lung
```

PT (silencing mediator for retinoid and thyroid hormone action), useful for
PT treating animal having disease associated with SMRT such as cancer,
PT rheumatoid arthritis.
XX
XX Example 15; SEQ ID NO 32; 260pp; English.
XX
CC The present invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding SMRT (silencing mediator for
CC retinoid and thyroid hormone action), where (I) specifically hybridises
CC with the nucleic acid molecule encoding SMRT and inhibits expression of a
CC SMRT. (I) specifically hybridises with at least 8-nucleobase portion of a
CC preferred target region on nucleic acid molecule encoding SMRT. Also
CC described is a composition (II) comprising (I) and a carrier or diluent.
CC (I) and (II) have cytostatic, antiinflammatory, antiarthritic and
CC antirheumatic activities, and can be used in antisense therapy, and as
CC SMRT expression inhibitors. (I) is useful for inhibiting the expression
CC of SMRT in cells or tissues. (I) is also useful for treating an animal
CC having a disease or condition associated with SMRT, e.g., inflammatory
CC disorder such as rheumatoid arthritis; or a hyperproliferative disorder
CC such as cancer chosen from leukaemia and breast cancer, by inhibiting the
CC expression of SMRT. (I) is useful for diagnostics, therapeutics,
CC prophylaxis and as research reagents and kits. The present sequence
CC represents a chimeric phosphorothioate antisense oligonucleotide which
CC inhibits human SMRT, which is used in an example from the present
CC invention. N.B. The present sequence is designated as SEQ ID NO:30 in
CC example 15 but corresponds to SEQ ID NO:32 in the Sequence Listing.
XX
XX Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 304 GGCCCACTCAGCTCTGCA 321
Db 1 GGCCCACTCAGCTCTGCA 18

RESULT 580
ADG86349/C
ID ADG86349 standard; DNA; 20 BP.
XX
XX AC ADG86349;
XX
XX 11-MAR-2004 (first entry)
XX
XX Human SMRT target region SEQ ID NO:63.
XX
XX SMRT; silencing mediator for retinoid and thyroid hormone action;
XX SMRT inhibitor; cytostatic; antiinflammatory; antiarthritic;
XX antirheumatic; antisense therapy; inflammatory disorder;
XX rheumatoid arthritis; hyperproliferative disorder; leukaemia;
XX breast cancer; human; ss; target.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX WO2003106645-A2.
XX
XX 24-DEC-2003.
XX
XX 17-JUN-2003; 2003WO-US018923.
XX
XX 17-JUN-2002; 2002US-00174014.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Freier SM, Dobie KW;
XX
XX WPI; 2004-082184/08.
XX
XX Novel antisense compound targeted to nucleic acid encoding SMRT
PT (silencing mediator for retinoid and thyroid hormone action), useful for

PT treating animal having disease associated with SMRT such as cancer,
PT rheumatoid arthritis.
XX
XX Example 15; SEQ ID NO 63; 260pp; English.
XX
CC The present invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding SMRT (silencing mediator for
CC retinoid and thyroid hormone action), where (I) specifically hybridises
CC with the nucleic acid molecule encoding SMRT and inhibits expression of a
CC SMRT. (I) specifically hybridises with at least 8-nucleobase portion of a
CC preferred target region on nucleic acid molecule encoding SMRT. Also
CC described is a composition (II) comprising (I) and a carrier or diluent.
CC (I) and (II) have cytostatic, antiinflammatory, antiarthritic and
CC antirheumatic activities, and can be used in antisense therapy, and as
CC SMRT expression inhibitors. (I) is useful for inhibiting the expression
CC of SMRT in cells or tissues. (I) is also useful for treating an animal
CC having a disease or condition associated with SMRT, e.g., inflammatory
CC disorder such as rheumatoid arthritis; or a hyperproliferative disorder
CC such as cancer chosen from leukaemia and breast cancer, by inhibiting the
CC expression of SMRT. (I) is useful for diagnostics, therapeutics,
CC prophylaxis and as research reagents and kits. The present sequence
CC represents a human SMRT target region sequence, which is used in an
CC example from the present invention. N.B. The present sequence is
CC designated as SEQ ID NO:61 in example 15 but corresponds to SEQ ID NO:63
CC in the Sequence Listing.
XX
XX Sequence 20 BP; 4 A; 5 C; 9 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 304 GGCCCACTCAGCTCTGCA 321
Db 20 GGCCCACTCAGCTCTGCA 3

RESULT 581
AD126862
ID AD126862 standard; DNA; 20 BP.
XX
XX AC AD126862;
XX
XX 22-APR-2004 (first entry)
XX
XX Cyclin dependent kinase 4 antisense oligonucleotide #28.
XX
XX cytostatic; antidiabetic; antiinfertility; gene therapy;
XX cyclin-dependent kinase 4; diabetes; infertility;
XX hyperproliferative disorder; cancer; antisense technology; human; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "OTHER= Phosphorothioate backbone. All cytidines
XX are 5-methylcytidines"
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX modified_base 15..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004005567-A1.
XX
XX 08-JAN-2004.
XX
XX 02-JUL-2002; 2002US-00188779.
XX

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XX 02-JUL-2002; 2002US-00188779.
XX (ISIS-) ISIS PHARM INC.
XX Dean NM, Freier SM, Dobie KW;
XX WPI; 2004-081710/08.
XX New antisense oligonucleotide, having a sequence targeted to a nucleic
XX acid encoding cyclin-dependent kinase 4, useful for preparing a
XX composition for treating diabetes, infertility or hyperproliferative
XX disorder, e.g., cancer.
XX Example 15; SEQ ID NO 47; 90pp; English.
XX The invention describes a new antisense oligonucleotide, having a
XX sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclin-
XX dependent kinase 4, specifically hybridises with the nucleic acid
XX encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-
XX dependent kinase 4. The antisense oligonucleotide is useful for preparing
XX a composition for treating diabetes, infertility or hyperproliferative
XX disorder, e.g., cancer. This sequence represents a human cyclin dependent
XX kinase 4 antisense oligonucleotide.
XX Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 254 CTGAGAGGCCCCACAC 271
DB 3 CTAGAGAGGCCCTCAC 20

RESULT 582
AD119170/C
ID AD119170 standard; DNA; 20 BP.
XX AC AD119170;
XX DT 22-APR-2004 (first entry)
XX DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #24.
XX gene therapy; antisense technology; PCTAIRE protein kinase 2;
XX neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX Homo sapiens.
XX Key Location/Qualifiers
XX modified_base 1. .20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "OTHER= Phosphorothioate backbone. All cytidines
XX are 5-methylcytidines"
XX modified_base 1. .5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX modified_base 15. .20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX US2003225256-A1.
XX 04-DEC-2003.
XX 31-MAY-2002; 2002US-00160787.
XX 31-MAY-2002; 2002US-00160787.
XX PR

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XX (ISIS-) ISIS PHARM INC.
XX Watt AT;
XX WPI; 2004-022085/02.
XX New antisense oligonucleotide, having a sequence targeted to a nucleic
XX acid encoding PCTAIRE protein kinase 2, useful for preparing a
XX composition for treating neurological disorders.
XX Claim 1; SEQ ID NO 37; 58pp; English.
XX The invention describes a new antisense oligonucleotide, having a
XX sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
XX protein kinase 2, that specifically hybridises with the nucleic acid
XX encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
XX The antisense oligonucleotide is useful for preparing a composition for
XX treating e.g., neurological disorders. This sequence represents a human
XX PCTAIRE protein kinase 2 antisense oligonucleotide.
XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 365 AGAGTGACCAAGCTTCAG 382
DB 20 AGAGTGACCAAGCTTCG 3

RESULT 583
AD119239
ID AD119239 standard; DNA; 20 BP.
XX AC AD119239;
XX DT 22-APR-2004 (first entry)
XX DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #93.
XX gene therapy; antisense technology; PCTAIRE protein kinase 2;
XX neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX Homo sapiens.
XX Key Location/Qualifiers
XX modified_base 1. .20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "OTHER= Phosphorothioate backbone. All cytidines
XX are 5-methylcytidines"
XX modified_base 1. .5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX modified_base 15. .20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX US2003225256-A1.
XX 04-DEC-2003.
XX 31-MAY-2002; 2002US-00160787.
XX 31-MAY-2002; 2002US-00160787.
XX (ISIS-) ISIS PHARM INC.
XX Watt AT;

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XX WPI; 2004-022085/02.
XX
XX New antisense oligonucleotide, having a sequence targeted to a nucleic
XX acid encoding PCFAIRE protein kinase 2, useful for preparing a
XX PT composition for treating neurological disorders.
XX
XX Example 15; SEQ ID NO 106; 58pp; English.
XX
XX The invention describes a new antisense oligonucleotide, having a
XX sequence comprising 8-80 bp targeted to a nucleic acid encoding PCFAIRE
XX protein kinase 2, that specifically hybridises with the nucleic acid
XX encoding PCFAIRE protein kinase 2 and having a sequence comprising 20 bp.
XX The antisense oligonucleotide is useful for preparing a composition for
XX treating e.g., neurological disorders. This sequence represents a human
XX PCFAIRE protein kinase 2 antisense oligonucleotide.
XX
XX Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 6.8e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 365 AGAGTGACGAGCTTCAG 382
XX Db 1 AGAGTGACGAGCTTCGTG 18
XX
XX RESULT 584
XX ADJ33972/c
XX ID ADJ33972 standard; DNA; 20 BP.
XX
XX AC ADJ33972;
XX
XX DT 22-APR-2004 (first entry)
XX
XX DE Human polo-like kinase antisense oligonucleotide SEQ ID NO:32.
XX
XX KW polo-like kinase; polo-like kinase inhibitor; antisense oligonucleotide;
XX cytosstatic; antiinflammatory; antimicrobial; antisense gene therapy;
XX KW kinase inhibitor; hyperproliferative disorder; cancer;
XX KW non-small cell lung cancer; oesophageal cancer; infection; inflammation;
XX KW tumour; human; phosphorothioate; 2'-O-methoxyethyl; ss.
XX
XX OS Homo sapiens.
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkages"
XX FT modified_base 1..5
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX FT modified_base 16..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX
XX WO2004011610-A2.
XX
XX PN 05-FEB-2004.
XX
XX PD 25-JUL-2003; 2003WO-US023413.
XX
XX PF 30-JUL-2002; 2002US-00209405.
XX
XX PR (ISIS-) ISIS PHARM INC.
XX
XX PA Wyatt JR, Freier SM;
XX
XX PI
XX

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DR WPI; 2004-143840/14.
XX
XX New antisense compounds targeted to nucleic acid molecules encoding polo-
XX like kinase, useful for treating diseases associated with aberrant
XX PT expression of polo-like kinase, e.g. non-small cell lung cancer or
XX PT esophageal cancer.
XX
XX Claim 1; SEQ ID NO 32; 138pp; English.
XX
XX The present invention describes a compound (I) of 8-80 nucleobases in
XX length targeted to a nucleic acid molecule encoding polo-like kinase,
XX where (I) specifically hybridises with nucleic acid molecule encoding
XX polo-like kinase and inhibits the expression of polo-like kinase, or
XX specifically hybridises with at least an 8-nucleobase portion of a
XX preferred target region on a nucleic acid molecule encoding polo-like
XX kinase. Also described: (1) a composition comprising (I) and a
XX pharmaceutical carrier or diluent; (2) inhibiting the expression of polo-
XX like kinase in cells or tissues comprising contacting the cells or
XX tissues with (I); (3) treating an animal having a disease or condition
XX associated with polo-like kinase comprising administering to the animal a
XX therapeutic or prophylactic amount of (I) so that expression of polo-like
XX kinase is inhibited; and (4) screening for an antisense compound
XX comprising contacting a preferred target region of a nucleic acid
XX molecule encoding polo-like kinase with one or more candidate antisense
XX compounds comprising at least an 8-nucleobase portion which is
XX complementary to the preferred target region, and selecting for one or
XX more candidate antisense compounds which inhibits the expression of a
XX nucleic acid molecule encoding polo-like kinase. (I) has cytosstatic,
XX antiinflammatory and antimicrobial activities, and can be used in
XX antisense gene therapy, and as a kinase inhibitor. The antisense
XX oligonucleotides or compounds (I) can be used for inhibiting the
XX expression of polo-like kinase, and for treating diseases or conditions
XX associated with aberrant expression of polo-like kinase, e.g.
XX hyperproliferative disorder such as cancer, including non-small cell lung
XX cancer or oesophageal cancer. The antisense compounds are also useful as
XX research reagents and kits, or in diagnostic, therapeutic and
XX prophylactic applications, e.g. to prevent or delay infection,
XX inflammation or tumour formation. The present sequence represents a human
XX polo-like kinase chimeric phosphorothioate antisense oligonucleotide,
XX which is used in an example from the present invention.
XX
XX Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 6.8e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 971 TACACCGAGACCTCAAGC 988
XX Db 20 TTCATCGAGACCTCAAGC 3
XX
XX RESULT 585
XX ADJ34039
XX ID ADJ34039 standard; DNA; 20 BP.
XX
XX AC ADJ34039;
XX
XX DT 22-APR-2004 (first entry)
XX
XX DE Human polo-like kinase target oligonucleotide SEQ ID NO:99.
XX
XX KW polo-like kinase; polo-like kinase inhibitor; antisense oligonucleotide;
XX cytosstatic; antiinflammatory; antimicrobial; antisense gene therapy;
XX KW kinase inhibitor; hyperproliferative disorder; cancer;
XX KW non-small cell lung cancer; oesophageal cancer; infection; inflammation;
XX KW tumour; human; target; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004011610-A2.
XX
XX PD 05-FEB-2004.

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XX 25-JUL-2003; 2003WO-US023413.
 XX PF
 XX 30-JUL-2002; 2002US-00209405.
 XX PR
 XX (ISIS-) ISIS PHARM INC.
 XX PA
 XX Wyatt JR, Freier SM;
 XX PI
 XX WPI; 2004-143840/14.
 XX DR
 XX New antisense compounds targeted to nucleic acid molecules encoding polo-
 XX PT like kinase, useful for treating diseases associated with aberrant
 XX PT expression of polo-like kinase, e.g. non-small cell lung cancer or
 XX PT esophageal cancer.
 XX PT
 XX Example 15; SEQ ID NO 99; 138pp; English.
 XX PS
 XX The present invention describes a compound (I) of 8-80 nucleobases in
 XX CC length targeted to a nucleic acid molecule encoding polo-like kinase,
 XX CC where (1) specifically hybridises with nucleic acid molecule encoding
 XX CC polo-like kinase and inhibits the expression of polo-like kinase, or
 XX CC specifically hybridises with at least an 8-nucleobase portion of a
 XX CC preferred target region on a nucleic acid molecule encoding polo-like
 XX CC kinase. Also described: (1) a composition comprising (I) and a
 XX CC pharmaceutical carrier or diluent; (2) inhibiting the expression of polo-
 XX CC like kinase in cells or tissues comprising contacting the cells or
 XX CC tissues with (1); (3) treating an animal having a disease or condition
 XX CC associated with polo-like kinase comprising administering to the animal a
 XX CC therapeutic or prophylactic amount of (I) so that expression of polo-like
 XX CC kinase is inhibited; and (4) screening for an antisense compound
 XX CC comprising contacting a preferred target region of a nucleic acid
 XX CC molecule encoding polo-like kinase with one or more candidate antisense
 XX CC compounds comprising at least an 8-nucleobase portion which is
 XX CC complementary to the preferred target region, and selecting for one or
 XX CC more candidate antisense compounds which inhibits the expression of a
 XX CC nucleic acid molecule encoding polo-like kinase. (I) has cytostatic,
 XX CC antiinflammatory and antimicrobial activities, and can be used in
 XX CC antisense gene therapy, and as a kinase inhibitor. The antisense
 XX CC oligonucleotides or compounds (I) can be used for inhibiting the
 XX CC expression of polo-like kinase, and for treating diseases or conditions
 XX CC associated with aberrant expression of polo-like kinase, e.g. lung
 XX CC hyperproliferative disorder such as cancer, including non-small cell lung
 XX CC cancer or oesophageal cancer. The antisense compounds are also useful as
 XX CC research reagents and kits, or in diagnostic, therapeutic and
 XX CC prophylactic applications, e.g. to prevent or delay infection,
 XX CC inflammation or tumour formation. The present sequence represents a human
 XX CC polo-like kinase target oligonucleotide, which is used in an example from
 XX CC the present invention.
 XX SQ
 XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 6.8e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 971 TACACCGAGACCTCAAGC 988
 DB 1 TTCATCGAGACCTCAAGC 18
 RESULT 586
 ADJ85507/c
 ID ADJ85507 standard; DNA; 20 BP.
 XX AC
 XX ADJ85507;
 XX DT
 XX 06-MAY-2004 (first entry)
 XX DE
 XX Nucleic acid analysis-related Tag probe SeqID575.
 XX KW restriction endonuclease site; T3 promoter site; Tag gene; Poly A site;
 XX T7 Promoter; nucleic acid analysis; synthetic Tag gene; assay control;
 KW

KW assay development; product development; product validation;
 KW quality control; probe; ss.
 XX Synthetic.
 XX Unidentified.
 XX WO2004007684-A2.
 XX 22-JAN-2004.
 XX 14-JUL-2003; 2003WO-US021990.
 XX 12-JUL-2002; 2002US-0395530P.
 XX (AFFY-) AFFYMETRIX INC.
 XX Christians FC;
 XX WPI; 2004-122923/12.
 XX New DNA molecules made by annealing and extending overlapping 60mer
 XX PT oligonucleotides, useful in producing synthetic Tag genes useful as assay
 XX PT controls, in assay development, product development and for quality
 XX PT control.
 XX Disclosure; SEQ ID NO 575; 91pp; English.
 XX This invention relates to a novel DNA molecule which comprises a DNA
 XX CC molecule made up of the following elements in a 5' to 3' direction: a
 XX CC first restriction endonuclease site; a T3 promoter site; at least one Tag
 XX CC gene comprising at least 5 20mer Tag sequences; a poly A site having at
 XX CC least 21 consecutive A residues; a second restriction endonuclease site
 XX CC which may be the same or different than the first restriction
 XX CC endonuclease site; or a T7 Promoter on the opposite strand as the T3
 XX CC promoter. The invention may be useful in nucleic acid analysis, in
 XX CC particular to synthetic Tag genes useful as assay controls, in assay
 XX CC development, product development and validation and for quality control.
 XX CC The present sequence is that of a Tag oligonucleotide probe which may be
 XX CC used during the creation of the novel DNA molecule of the invention.
 XX SQ
 XX Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 6.8e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1169 GCTGCATCTTCTATGAGA 1186
 DB 18 GCTGCATCTTCTATGAGA 1
 RESULT 587
 ADK96858/c
 ID ADK96858 standard; DNA; 20 BP.
 XX AC
 XX ADK96858;
 XX 06-MAY-2004 (first entry)
 XX DE
 XX Primer of the invention #2578.
 XX KW human; single nucleotide polymorphism; SNP; ss; primer.
 XX OS Synthetic.
 XX JP2003259875-A.
 XX 16-SEP-2003.
 XX 08-MAR-2002; 2002JP-00064373.
 XX 08-MAR-2002; 2002JP-00064373.
 XX

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PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX WPI; 2004-093977/10.
XX
XX Novel polynucleotide useful for PCR amplification along with two DNA
PT fragment from another set of sequences, or for detecting single
PT nucleotide polymorphism in human gene.
XX
XX Claim 2; SEQ ID NO 5897; 2627pp; Japanese.
XX
XX The present invention relates to a polynucleotide isolated from a human
CC gene and is useful for detecting a single nucleotide polymorphism in a
CC human gene or for diagnosing of disease. The invention enables the
CC detection of a single nucleotide polymorphism in a human gene. The
CC present sequence represents a primer of the invention.
XX
XX Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 375 GGCTTCAGCCAGCTCCTC 392
Db 19 GGCTTCAGCTACGACCTC 2
RESULT 588
ADK94869/c
ID ADK94869 standard; DNA; 20 BP.
XX
XX AC ADK94869;
XX
XX 06-MAY-2004 (first entry)
XX
XX Primer of the invention #589.
XX
XX human; single nucleotide polymorphism; SNP; ss; primer.
XX Synthetic.
XX JP2003259875-A.
XX
XX 16-SEP-2003.
XX
XX 08-MAR-2002; 2002JP-00064373.
XX
XX 08-MAR-2002; 2002JP-00064373.
XX
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX WPI; 2004-093977/10.
XX
XX Novel polynucleotide useful for PCR amplification along with two DNA
PT fragment from another set of sequences, or for detecting single
PT nucleotide polymorphism in human gene.
XX
XX Claim 2; SEQ ID NO 3898; 2627pp; Japanese.
XX
XX The present invention relates to a polynucleotide isolated from a human
CC gene and is useful for detecting a single nucleotide polymorphism in a
CC human gene or for diagnosing of disease. The invention enables the
CC detection of a single nucleotide polymorphism in a human gene. The
CC present sequence represents a primer of the invention.
XX
XX Sequence 20 BP; 0 A; 4 C; 8 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 972 ACACCGAGCCTCAAGCC 989
Db 18 ACACCGAGCACCAGCC 1
RESULT 589
ADJ17762/c
ID ADJ17762 standard; DNA; 20 BP.
XX
XX AC ADJ17762;
XX
XX 20-MAY-2004 (first entry)
XX
XX Antisense DNA oligo used to modulate human LRH1 expression SeqID 2312.
XX
XX human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW gall stone; triglyceridaemia; obesity; hepatitis;
KW hepatocellular carcinoma; aromatase; cytostatic; antilipaeamic;
KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW antiinflammatory; virucidal.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /label= OTHER= phosphorothioate backbone
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
XX
XX WO2004003201-A2.
XX
XX 08-JAN-2004.
XX
XX 01-JUL-2003; 2003WO-US020865.
XX
XX 01-JUL-2002; 2002US-0392813P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Kane CD;
XX
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT related homologue-1 (LRH1), useful for treating breast cancer,
PT dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
XX Example 15; SEQ ID NO 2312; 909pp; English.
XX
XX This invention relates to novel antisense compounds useful for modulating
CC the expression of liver related homologue-1 (LRH1) and splice variants
CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC length that target a portion of an active site on the nucleic acid
CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC nuclear receptor protein that functions as a tissue specific
CC transcription factor. The present invention describes antisense
CC oligonucleotides that comprise at least one modified internucleoside
CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC methylcytidine. These antisense compounds are useful for treating or
CC diagnosing a disease associated with LRH1, such as breast cancer,
CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
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CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
 CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
 CC hepatitis, as well as hepatocellular carcinoma or a condition associated
 CC with aromatase activity. Accordingly, these compositions exhibit
 CC cytotatic, antilipemic, antiarteriosclerotic, anorectic, hepatotropic,
 CC litholytic, antiinflammatory and virucidal activities. This
 CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
 CC expression of the human LRH1 protein of the invention.
 XX
 SQ Sequence 20 BP; 4 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 6.8e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1447 AAACATCCATCTTCCTC 1464
 Db 19 AAACATCCACTCTGCCTC 2
 RESULT 590
 ADJ18408/c
 ID ADJ18408 standard; DNA; 20 BP.
 XX
 AC ADJ18408;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 2958.
 KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
 KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
 KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
 KW gall stone; triglyceridaemia; obesity; hepatitis;
 KW hepatocellular carcinoma; aromatase; cytotatic; antilipemic;
 KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;
 KW antiinflammatory; virucidal.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /label= OTHER= phosphorothioate backbone
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
 FT cytidine nucleobases are 5-methylcytidine."
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
 FT cytidine nucleobases are 5-methylcytidine."
 XX
 PN WO2004003201-A2.
 XX
 XX 08-JAN-2004.
 XX
 XX 01-JUL-2003; 2003WO-US020865.
 XX
 XX 01-JUL-2002; 2002US-0392813P.
 XX
 XX (PHAA) PHARMACIA CORP.
 XX
 XX Kane CD;
 PI
 XX WPI; 2004-083058/08.
 DR
 XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
 XX related homologue-1 (LRH1), useful for treating breast cancer,
 PT
 PT

PT dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
 XX
 PS Example 15; SEQ ID NO 2958; 909pp; English.
 XX
 CC This invention relates to novel antisense compounds useful for modulating
 CC the expression of liver related homologue-1 (LRH1) and splice variants
 CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
 CC length that target a portion of an active site on the nucleic acid
 CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
 CC nuclear receptor protein that functions as a tissue specific
 CC transcription factor. The present invention describes antisense
 CC oligonucleotides that comprise at least one modified internucleoside
 CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
 CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
 CC methylcytidine. These antisense compounds are useful for treating or
 CC diagnosing a disease associated with LRH1, such as breast cancer,
 CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
 CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
 CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
 CC hepatitis, as well as hepatocellular carcinoma or a condition associated
 CC with aromatase activity. Accordingly, these compositions exhibit
 CC cytotatic, antilipemic, antiarteriosclerotic, anorectic, hepatotropic,
 CC litholytic, antiinflammatory and virucidal activities. This
 CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
 CC expression of the human LRH1 protein of the invention.
 XX
 SQ Sequence 20 BP; 4 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 6.8e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1447 AAACATCCATCTTCCTC 1464
 Db 18 AAACATCCACTCTGCCTC 1
 RESULT 591
 ADJ17467/c
 ID ADJ17467 standard; DNA; 20 BP.
 XX
 AC ADJ17467;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 2017.
 KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
 KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
 KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
 KW gall stone; triglyceridaemia; obesity; hepatitis;
 KW hepatocellular carcinoma; aromatase; cytotatic; antilipemic;
 KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;
 KW antiinflammatory; virucidal.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /label= OTHER= phosphorothioate backbone
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
 FT cytidine nucleobases are 5-methylcytidine."
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
 FT cytidine nucleobases are 5-methylcytidine."
 FT

```

XX PN WO2004003201-A2.
XX PD 08-JAN-2004.
XX PF 01-JUL-2003; 2003WO-US020865.
XX PR 01-JUL-2002; 2002US-0392813P.
XX PA (PHRA ) PHARMACIA CORP.
XX PI Kane CD;
XX DR WPI; 2004-083058/08.
XX PT New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX PT related homologue-1 (LRH1), useful for treating breast cancer,
XX PT dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX FS Example 15; SEQ ID NO 1017; 909pp; English.
XX CC This invention relates to novel antisense compounds useful for modulating
XX CC the expression of liver related homologue-1 (LRH1) and splice variants
XX CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
XX CC length that target a portion of an active site on the nucleic acid
XX CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
XX CC nuclear receptor protein that functions as a tissue specific
XX CC transcription factor. The present invention describes antisense
XX CC oligonucleotides that comprise at least one modified internucleoside
XX CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
XX CC a 2'-O-methoxyethyl (2' MOE) and at least one modified internucleoside
XX CC methylene. These antisense compounds are useful for treating or
XX CC diagnosing a disease associated with LRH1, such as breast cancer,
XX CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
XX CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
XX CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
XX CC hepatitis, as well as hepatocellular carcinoma or a condition associated
XX CC with aromatase activity. Accordingly, these compositions exhibit
XX CC cytostatic, antipapemic, antiarteriosclerotic, anorectic, hepatotropic,
XX CC litholytic, antiinflammatory and virucidal activities. This
XX CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
XX CC expression of the human LRH1 protein of the invention.
XX SQ Sequence 20 BP; 4 A; 1 C; 9 G; 6 T; 0 U; 0 Other;

Query Match          0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1447 AAACATCCATCTCTCTC 1464
Db 20 AAACATCCACTGCTCTC 3

RESULT 592
ID ADM93669
ID ADM93669 standard; DNA; 20 BP.
AC ADM93669;
XX
XX 01-JUL-2004 (first entry)
XX Human NOVX PCR primer #13.
XX
XX Human; NOVX; PCR; ss; congenital heart defect; cardiomyopathy;
XX atherosclerosis; hypertension; pulmonary stenosis; scleroderma;
XX adenocarcinoma; haemophilia; graft-versus-host disease; cancer;
XX neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
XX multiple sclerosis; diabetes; obesity; bronchial asthma;
XX acquired immunodeficiency syndrome; AIDS; Crohn's disease;
XX infectious disease; anorexia; immune disorder; primer.
XX
XX Homo sapiens.

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XX PN US2004067882-A1.
XX PD 08-APR-2004.
XX PF 05-NOV-2002; 2002US-00287971.
XX PR 22-OCT-2001; 2001US-00035568.
XX PR 05-NOV-2001; 2001US-0338626P.
XX PR 06-NOV-2001; 2001US-0333072P.
XX PR 09-NOV-2001; 2001US-0345398P.
XX PR 09-NOV-2001; 2001US-0348283P.
XX PR 15-NOV-2001; 2001US-0335610P.
XX PR 21-NOV-2001; 2001US-0332152P.
XX PR 28-NOV-2001; 2001US-0333912P.
XX PR 29-NOV-2001; 2001US-0099742S.
XX PR 29-NOV-2001; 2001US-0334300P.
XX PR 04-DEC-2001; 2001US-0336576P.
XX PR 05-FEB-2002; 2002US-0354807P.
XX PR 15-MAY-2002; 2002US-0380968P.
XX PR 16-MAY-2002; 2002US-0381043P.
XX PR 02-JUL-2002; 2002US-0393148P.
XX PR 06-AUG-2002; 2002US-0393262P.
XX PR 06-AUG-2002; 2002US-0401479P.
XX PR 07-AUG-2002; 2002US-0401626P.
XX PR 07-AUG-2002; 2002US-0401593P.
XX PR 26-AUG-2002; 2002US-0401695P.
XX PR 26-AUG-2002; 2002US-0406181P.
XX
XX (ALSO/) ALSOBROOK J P.
XX (ALVA/) ALVAREZ E.
XX (ANDE/) ANDERSON D W.
XX (BARO/) BARON M.
XX (BOLD/) BOLDOGG F L.
XX (BURG/) BURGESS C E.
XX (CASM/) CASMAN S J.
XX (CHAP/) CHAPOVAL A.
XX (DHAN/) DHANABAL M.
XX (EDIN/) EDINGER S R.
XX (EISE/) EISEN A.
XX (ELLE/) ELLERMAN K.
XX (ETTE/) ETTENBERG S.
XX (GANG/) GANGOLLI E A.
XX (GERL/) GERLACH V.
XX (GORM/) GORMAN L.
XX (GROS/) GROSSE W M.
XX (GUOX/) GUO X.
XX (HACK/) HACKETT C.
XX (JIWW/) JI W.
XX (KEKU/) KEKUDA R.
XX (KHRA/) KHRAMTSOV N V.
XX (LEPL/) LEFLEY D M.
XX (LILL/) LI L.
XX (MACD/) MACDOUGALL J R.
XX (MALY/) MALYANKAR U M.
XX (MAZU/) MAZUR A.
XX (MCQU/) MCQUEENEY K.
XX (MEZE/) MEZES P S.
XX (MILL/) MILLER C E.
XX (MILL/) MILLET I.
XX (MISH/) MISHEA V.
XX (PADI/) PADIGARU M.
XX (PATT/) PATTURAJAN M.
XX (PENA/) PENA C E A.
XX (PEYM/) PEYMAN J A.
XX (RAST/) RASTELLI L.
XX (RIEG/) RIEGER D K.
XX (ROTH/) ROTHENBERG M E.
XX (SHEN/) SHENOY S G.
XX (SHIM/) SHIMKETS R A.
XX (SMIT/) SMITHSON G.
XX (SPAD/) SPADERNA S K.
XX (STAR/) STARLING G.

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Tue Nov 2 13:39:09 2004

PA (SPYT/) SPYTEK K A.
PA (STON/) STONE D J.
PA (TCHE/) TCHERNEV V T.
PA (TWOV/) TWOMLOW N.
PA (VERN/) VERNET C A M.
PA (ZERR/) ZERRHUSEN B D.
PA (VOSS/) VOSS E Z.
PA (ZHON/) ZHONG M.
XX
XX Alsbrook JP, Alvarez E, Anderson DM, Baron M, Boldog FL,
PI Burgess CE, Casman SJ, Chapoval A, Dhanabal M, Edinger SR, Eisen A;
PI Ellerman K, Ettenberg S, Gangolli EA, Gerlach V, Gorman L;
PI Grose WM, Guo X, Hackett C, Ji W, Kekuda R, Khrantsov NV;
PI Lepley DM, Li L, Macdougall JR, Malyankar UM, Mazur A, McQueeney K;
PI Mezes PS, Miller CE, Millet I, Mishra V, Padigaru M, Patturajan M;
PI Pena CEA, Peyman JA, Rastelli L, Rieger DK, Rothenberg ME;
PI Shenoy SG, Shimkets RA, Smithson G, Soaderna SK, Starling G;
PI Spytak KA, Stone DJ, Tchernev VT, Twomlow N, Vernet CAM;
PI Zerhusen BD, Voss EZ, Zhong M;
XX
XX WPI; 2004-355303/33.
XX
XX Novel isolated NOVX polypeptide useful treating or preventing disorders
PT or syndromes such as Alzheimer's disease, Parkinson's disease, multiple
PT sclerosis, diabetes, obesity, cancer, bronchial asthma, Crohn's disease.
XX
XX Example C; SEQ ID NO 301; 330pp; English.
XX
XX The invention relates to human NOVX polypeptides and the polynucleotides
CC encoding them. The NOVX polypeptides and polynucleotides are useful for
CC determining the presence of or predisposition to a disease associated
CC with altered levels of the sequences in a mammalian subject, and for
CC treating or preventing a pathology associated with NOVX. The
CC polypeptides, polynucleotides and antibodies that bind immunospecifically
CC to the polypeptides are useful for treating or preventing disorders or
CC syndromes such as congenital heart defects, cardiomyopathy,
CC atherosclerosis, hypertension, pulmonary stenosis, scleroderma,
CC neurodegenerative disorders, Alzheimer's disease, Parkinson's disease,
CC adenocarcinoma, haemophilia, graft-versus-host disease, cancer,
CC multiple sclerosis, diabetes, obesity, bronchial asthma, acquired
CC immunodeficiency syndrome (AIDS), Crohn's disease, infectious disease,
CC anorexia and immune disorders. This sequence represents a PCR primer used
CC to amplify a human NOVX polynucleotide of the invention. Note: The
CC sequence data for this patent is also available from USPTO at
CC seqdata.uspto.gov/sequence.html.
XX
XX Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1530 GCTCAAAAAGGAGGCCAG 1547
Db 1 GCTCAAAAAGGAGGCCAG 18
RESULT 593
ADM14451/C
ID ADM14451 standard; DNA; 20 BP.
XX
XX ADM14451;
AC
XX
XX 01-JUL-2004 (first entry)
DT
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:538.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiatic; neuroprotective; antiinflammatory;
KW neuroprotective; neurotropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxycetylthyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxycetylthyls"
XX
XX W02004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX Claim 4; SEQ ID NO 638; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiatic, neuroprotective,
CC antiinflammatory, neuroprotective, neurotropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 508 GGCTACTCTGGAGAGCTG 525
Db 20 GCCTACTCTGGAGAGCTG 3

RESULT 594
 ADO80387/c
 ID ADO80387 standard; DNA; 20 BP.
 XX
 AC ADO80387;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Mouse phospholipase C gamma 2 gene amplification primer plcg2-40.
 XX
 KW ss; primer; anti-inflammatory; dermatological; osteopathic;
 KW ophthalmological; antiulcer; murine; human;
 KW phospholipase C gamma-2 protein; diagnosis; Wegener's granulomatosis;
 KW Churg-Strauss syndrome; Polyarteritis nodosa.
 XX
 OS Mus musculus.
 XX
 XX W02004020619-A1.
 PN
 XX 11-MAR-2004.
 PD
 XX 01-SEP-2003; 2003WO-EP009690.
 PF
 XX 30-AUG-2002; 2002US-0407517P.
 PR
 XX (INGE-) INGENIUM PHARM AG.
 PA
 XX Constien R, Mudde G, Schroeder A, Yu P, Hanke P;
 PI
 XX WPI; 2004-449493/42.
 DR
 XX
 XX Mutant murine or human Phospholipase C (PLC) gamma-2 proteins, useful for
 PT preventing, diagnosing and treating inflammatory diseases, e.g. Wegener's
 PT granulomatosis, Churg-Strauss syndrome or Polyarteritis nodosa.
 PT
 XX Example 4; SEQ ID NO 56; 229pp; English.
 PS
 XX The invention relates to an isolated, mutant murine or human
 CC Phospholipase C (PLC) gamma-2 protein. The mutant PLCgamma-2 proteins and
 CC nucleic acids that encode them may be used in the prevention, diagnosis
 CC and treatment of diseases associated with inappropriate PLCgamma-2
 CC expression. For example, the peptides and nucleic acids may be used to
 CC treat disorders associated with decreased expression by rectifying
 CC mutations or deletions in a patient's genome that affect the activity of
 CC PLCgamma-2 by expressing inactive proteins or to supplement the patients
 CC own production of PLCgamma-2. Conversely inhibitory nucleic acids may be
 CC administered to down regulate PLCgamma-2 expression. The PLCgamma-2
 CC proteins and nucleic acids may also be used in assays to identify
 CC modulators of PLCgamma-2 expression and activity. The antibodies and
 CC antagonists may also be used to down regulate expression and activity.
 CC Disorders that may be prevented, diagnosed and/or treated by the above
 CC methods include, e.g. Wegener's granulomatosis, Churg-Strauss syndrome or
 CC Polyarteritis nodosa. This sequence corresponds to a PCR primer to
 CC amplify the mouse phospholipase C gamma 2 gene.
 XX
 SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 6.8e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 652 GCCACCGTCTACAAAGGC 669
 Db |||||
 19 GCCACCGTCTACAAAGGC 2
 RESULT 595
 ADN01780
 ID ADN01780 standard; DNA; 20 BP.
 XX
 AC ADN01780;
 XX
 DT 29-JUL-2004 (first entry)

XX Human HIP1 antisense oligonucleotide ISIS251585.
 DE
 XX Human; antisense; ss; Huntingtin interacting protein 1; HIP1;
 KW cellular apoptosis; Huntington's disease; chromosome 7q11.23.
 KW
 XX Homo sapiens.
 OS
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate linkages and all cytidines are 5
 FT -methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residues"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residues"
 XX
 XX US2004092465-A1.
 PN
 XX 13-MAY-2004.
 PD
 XX 11-NOV-2002; 2002US-00293864.
 PF
 XX 11-NOV-2002; 2002US-00293864.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Dobie KW;
 PI
 XX WPI; 2004-374983/35.
 DR
 XX
 XX New compound that modulates huntingtin interacting protein 1 expression,
 PT useful in treating an animal having a disease or condition involving
 PT dysregulation of cellular apoptosis.
 PT
 XX Example 15; SEQ ID NO 18; 85pp; English.
 PS
 XX The invention relates to a compound targeted to a nucleic acid molecule
 CC encoding huntingtin interacting protein 1, HIP1. The compound, 8-80
 CC nucleobases in length, is an antisense oligonucleotide, where the
 CC compound specifically hybridises with the nucleic acid molecule encoding
 CC huntingtin interacting protein 1 comprising a sequence appearing as
 CC ADN01766 and inhibits the expression of huntingtin interacting protein 1.
 CC Also included are inhibiting the expression of huntingtin interacting
 CC protein 1 in cells or tissues, screening for a modulator of huntingtin
 CC interacting protein 1, a diagnostic method for identifying a disease
 CC state, a kit or assay device comprising the compound and treating an
 CC animal having a disease or condition associated with huntingtin
 CC interacting protein 1 compound so that expression of huntingtin
 CC interacting protein 1 is inhibited. The compound and the methods are
 CC useful in treating an animal having a disease or condition involving
 CC dysregulation of cellular apoptosis e.g. Huntington's disease. The HIP1
 CC gene is located on chromosome 7q11.23. The present sequence is an
 CC antisense oligonucleotide of the invention.
 XX
 SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 6.8e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 987 GCCCCAGACCTGCTCAT 1004
 Db |||||
 1 GCCCCACATCTGCTCAT 18
 RESULT 596

transplant rejection; immune system; rheumatoid arthritis; lupus;
inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
Homo sapiens.
WO2004042346-A2.
21-MAY-2004.
24-APR-2003; 2003WO-US012946.
24-APR-2002; 2002US-00131831.
20-DEC-2002; 2002US-00325899.
(EXPR-) EXPRESSION DIAGNOSTICS INC.
Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
Rosenberg S;
WPI; 2004-400724/37.
Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
rejection, in an individual, comprises detecting the expression level of
the genes.
Claim 58; SEQ ID NO 2065; 1762pp; English.
The present invention relates to diagnosing or monitoring transplant
rejection, e.g. cardiac or kidney transplant rejection, in an individual
comprises detecting the expression level of one or more genes. The
methods, system and kits are useful in diagnosing or monitoring
transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
islet, lung, bone marrow or stem cell transplant rejection,
xenotransplant rejection or mechanical organ replacement rejection, in an
individual. The methods are also useful in assessing the immune status of
an individual. The methods are also useful in diagnosing and monitoring
diseases that involve the immune system, e.g. rheumatoid arthritis,
lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
viral, bacterial or fungal infection. The present sequence represents a
primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
of allograft rejection and other disorders.
Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
Query Match Similarity 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1120 CTGCTTGGTCCACGGAC 1137
DB 18 CTGCTTGGTCCACGGAC 1
RESULT 598
AAX09234
ID AAX09234 standard; DNA; 21 BP.
XX
AC AAX09234;
XX
DT 24-MAR-1999 (first entry)
XX
DE Human biallelic polymorphic marker upstream primer #114.
XX
KW Polymorphism; biallelic; human; forensic; paternity testing; disease;
XX detection; phenotypic typing; characteristic; infection; hereditary;
KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;
KW treatment; marker; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
XX WO9820165-A2.

ADN01858/c
ID ADN01858 standard; cDNA; 20 BP.
XX
AC ADN01858;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human HIP1 antisense target sequence ISIS168101.
XX
KW Human; antisense; ss; Huntingtin interacting protein 1; HIP1;
KW cellular apoptosis; Huntington's disease; chromosome 7q11.23.
XX
OS Homo sapiens.
XX
FN US2004092465-A1.
XX
PD 13-MAY-2004.
XX
PF 11-NOV-2002; 2002US-00293864.
XX
PR 11-NOV-2002; 2002US-00293864.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW;
XX
DR WPI; 2004-374983/35.
XX
PT New compound that modulates huntingtin interacting protein 1 expression,
PT useful in treating an animal having a disease or condition involving
PT dysregulation of cellular apoptosis.
XX
PS Example 15; SEQ ID NO 96; 85pp; English.
XX
CC The invention relates to a compound targeted to a nucleic acid molecule
CC encoding huntingtin interacting protein 1, HIP1. The compound, 8-80
CC nucleobases in length, is an antisense oligonucleotide, where the
CC compound specifically hybridizes with the nucleic acid molecule encoding
CC huntingtin interacting protein 1 comprising a sequence appearing as
CC ADN01858 and inhibits the expression of huntingtin interacting protein 1.
CC Also included are inhibiting the expression of huntingtin interacting
CC protein 1 in cells or tissues, screening for a modulator of huntingtin
CC interacting protein 1, a diagnostic method for identifying a disease
CC state, a kit or assay device comprising the compound and treating an
CC animal having a disease or condition associated with huntingtin
CC interacting protein 1 compound so that expression of huntingtin
CC interacting protein 1 is inhibited. The compound and the methods are
CC useful in treating an animal having a disease or condition involving
CC dysregulation of cellular apoptosis e.g. Huntington's disease. The HIP1
CC gene is located on chromosome 7q11.23. The present sequence is an
CC antisense target region from the HIP1 cDNA.
XX
SQ Sequence 20 BP; 5 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 987 GCCCCAGACCTGCTCAT 1004
DB 20 GCCCCAGACCTGCTCAT 3
RESULT 597
ADP12056/c
ID ADP12056 standard; DNA; 20 BP.
XX
AC ADP12056;
XX
DT 12-AUG-2004 (first entry)
XX
DE Set 2 right PCR primer for marker probe #162.
XX

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XX PD 14-MAY-1998.
XX PF 05-NOV-1997; 97WO-US020313.
XX PR 06-NOV-1996; 96US-0030455P.
XX PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX PI Lander ES, Wang D, Hudson T;
XX DR WPI; 1998-286974/25.
XX CC New isolated nucleic acid segments from the human genome - used for
XX CC determining polymorphic forms for use in e.g. forensics, paternity
XX CC testing or phenotypic typing for disease.
XX FS Claim 15; Page 59; 310pp; English.
XX CC AAX09121-X10268 are allele-specific oligonucleotide primers used in the
XX CC isolation of various biallelic polymorphic markers found in the human
XX CC genome (represented in AAX10269-X12937). These primers can be used in a
XX CC method for determining polymorphic forms in an individual for use in e.g.
XX CC forensics, paternity testing or for phenotypic typing for diseases such
XX CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
XX CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
XX CC hypercholesterolemia, polycystic kidney disease, hereditary
XX CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
XX CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
XX CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,
XX CC autoimmune diseases, inflammation, cancer, diseases of the nervous
XX CC system, infection by pathogenic microorganisms, and characteristics such
XX CC as longevity, appearance (e.g. baldness, obesity), strength, speed,
XX CC endurance, fertility, and susceptibility or receptivity to particular
XX CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid
XX CC segments can also be used to produce medicaments for the treatment or
XX CC prophylaxis of such diseases
XX CC
XX CC Sequence 21 BP; 1 A; 9 C; 0 G; 11 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 7.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 826 TCCTCACCCTTGCTTT 843
Db 1 TTCCTCACCCTTCTTT 18
RESULT 599
AAX43747
ID AAX43747 standard; DNA; 21 BP.
XX AC AAX43747;
XX
XX 16-NOV-1998 (first entry)
XX CC Cancer associated gene primer 16.
XX
XX ss; cancer; PCR; Northern blotting; ribonuclease protection assay;
XX CC diagnosis; metastatic cancer; primer; amplification.
XX CC
XX OS Synthetic.
XX
XX WO9837187-A1.
XX PD 27-AUG-1998.
XX
XX 18-FEB-1998; 98WO-JP000667.
XX PF
XX 21-FEB-1997; 97JP-00052508.
XX PR
XX (TAKI ) TAKARA SHUZO CO LTD.
XX PA

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XX PI Yoshikawa Y, Mukai H, Asada K, Hino F, Kato I;
XX DR WPI; 1998-467552/40.
XX CC Detection of cancer cells in tissue samples - by changes in mRNA
XX CC expression compared to normal tissue of specific cancer-associated gene
XX CC sequences.
XX FS Disclosure; Page 71; 92pp; Japanese.
XX
XX CC The primers AAV43732-V43776 were to produce cancer associated gene
XX CC fragments which can be used to detect cancer cells in tissue samples or
XX CC biological fluids. They are detected by monitoring the change in mRNA
XX CC expression as compared to normal tissue of one or more cancer-associated
XX CC genes whose cDNA stringently hybridises to the nucleic acid fragments.
XX CC The change in expression may be an increase or a decrease compared to
XX CC normal tissue. The mRNA expression may be determined by PCR, Northern
XX CC blotting or ribonuclease protection assay, or by determining the change
XX CC in the amount of protein encoded by the gene(s) as compared to normal
XX CC tissue, for example by using a labelled antibody recognising the protein.
XX CC Detection of cancer cells for cancer diagnosis, including detection of
XX CC metastatic cancer cells in tissues other than the primary tumour site
XX CC
XX CC Sequence 21 BP; 9 A; 7 C; 2 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 7.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1311 GACATACCACTACCCCAA 1328
Db 2 GAACACCACTACCCCAA 19
RESULT 600
AAX26230
ID AAX26230 standard; DNA; 21 BP.
XX AC AAX26230;
XX
XX 30-NOV-1999 (first entry)
XX CC Human polymorphic region 419.
XX
XX DE Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
XX CC cell viability; loss of heterozygosity; precancerous condition; ASI;
XX CC allele specific inhibitor; somatic cell; diagnosis; prevention;
XX CC atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
XX CC dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
XX CC graft versus host disease; malignant cell removal; bone marrow; ss.
XX
XX OS Homo sapiens.
XX
XX WO9841648-A2.
XX
XX 24-SEP-1998.
XX
XX 19-MAR-1998; 98WO-US005419.
XX PF
XX 20-MAR-1997; 97US-0041057P.
XX PR
XX (VARI-) VARIAGENICS INC.
XX
XX Housman D, Ledley FD, Stanton VP;
XX PI WPI; 1998-521232/44.
XX
XX Identifying target genes for allele-specific drugs - used for diagnosis,
XX CC prevention and treatment of, e.g. cancers, atherosclerotic plaque,
XX CC dysplastic lesions, endometriosis or graft versus host disease.
XX CC
XX FS Disclosure; Fig 7; 605pp; English.

```


CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene
 CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the
 CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
 CC graft versus host disease. The method can also be used to remove
 CC malignant cells from bone marrow transplants. AAZ25812-Z26825 represent
 CC human polymorphic sites described in the method of the invention
 XX
 SQ Sequence 21 BP; 7 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 7.1e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 991 CAGAACCTGCTCATCAAC 1008
 Db 3 CAGGAGCTGCTCATCAAC 20
 RESULT 602
 ADG27367/C
 ID ADG27367 standard; DNA; 21 BP.
 XX
 AC ADG27367;
 XX
 DT 26-FEB-2004 (first entry)
 XX
 DE Human LPIN1 gene PCR primer, SEQ ID NO:9.
 XX
 KW Human; LPIN1; chromosome 2p21; lipin 1A; adipocyte maturation;
 KW adipocyte metabolism; adipose tissue development; transgenic animal;
 KW diagnosis; drug screening; fat accumulation inhibition; lipodystrophy;
 KW obesity; diabetes; atherosclerosis; insulin response; antilipaeamic;
 KW anorectic; antidiabetic; antiarteriosclerotic; PCR; primer; ss.
 XX Homo sapiens.
 OS
 XX WO200259248-A2.
 FN
 XX 01-AUG-2002.
 FD
 XX 20-DEC-2001; 2001WO-US050237.
 PF
 XX 22-DEC-2000; 2000US-0257772P.
 PR
 XX (REGC) UNIV CALIFORNIA.
 PA
 XX Reue K, Peterfy M;
 PI
 XX WPI; 2002-599767/64.
 DR
 XX New mouse Lpin1 and human LPIN1 genes associated with adiposity/insulin
 PT response regulation, useful for screening agents that alter adipose
 PT tissue development, or for diagnosing a predilection to lipodystrophy,
 PT obesity or diabetes.
 XX
 PS Claim 26; SEQ ID NO 9; 95pp; English.
 XX
 CC The invention relates to mouse Lpin1 and human LPIN1 nucleic acids
 CC (ADG27386-ADG27387) and the proteins they encode (ADG27361-ADG27363). The
 CC Lpin1/LPIN1 gene encodes a novel nuclear protein called lipin 1, which is
 CC highly expressed in adipocytes and plays a key role in adipocyte
 CC maturation and metabolism. In mice, mutations in the Lpin1 gene are
 CC responsible for the fatty liver dystrophy phenotype (fld) which exhibits
 CC characteristics of human lipodystrophy. Lipin 1 proteins, and the related

XX This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene
 CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the
 CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
 CC graft versus host disease. The method can also be used to remove
 CC malignant cells from bone marrow transplants. AAZ25812-Z26825 represent
 CC human polymorphic sites described in the method of the invention
 XX
 SQ Sequence 21 BP; 6 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 7.1e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 991 CAGAACCTGCTCATCAAC 1008
 Db 2 CAGGAGCTGCTCATCAAC 19
 RESULT 601
 AAZ26229
 ID AAZ26229 standard; DNA; 21 BP.
 XX
 AC AAZ26229;
 XX
 DT 30-NOV-1999 (first entry)
 XX
 DE Human polymorphic region 418.
 XX
 KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
 KW graft versus host disease; malignant cell removal; bone marrow; ss.
 XX Homo sapiens.
 OS
 XX WO9841648-A2.
 FN
 XX 24-SEP-1998.
 PD
 XX 19-MAR-1998; 98WO-US005419.
 PF
 XX 20-MAR-1997; 97US-0041057P.
 PR
 XX (VARI-) VARIAGENICS INC.
 PA
 XX Housman D, Ledley FD, Stanton VP;
 PI
 XX WPI; 1998-521232/44.
 DR
 XX Identifying target genes for allele-specific drugs - used for diagnosis,
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
 PT dysplastic lesions, endometriosis or graft versus host disease.
 XX
 PS Disclosure; Fig 7; 605pp; English.
 XX
 CC This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is

QY 1218 CACGGTGGAGGAACGCT 1235
 Db | ||||| ||||| |||
 4 CGCGTGGAGGAACGCT 21

RESULT 605
 ADG29735/C
 ID ADG29735 standard; RNA; 21 BP.
 XX AC ADG29735;
 XX DT 26-FEB-2004 (first entry)
 XX DE CDK2-targeted siRNA DNA-RNA hybrid - SEQ ID 301.
 XX KW double-stranded short interfering nucleic acid; siRNA;
 KW antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian;
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
 KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
 KW amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; CDK2.

XX Unidentified.
 OS Synthetic.
 XX WO2003074654-A2.
 XX 12-SEP-2003.
 XX 20-FEB-2003; 2003WO-US005028.
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 XX Mcswiggen J, Beigelman L, Chowira B, Pavco P, Fosnaugh K;
 PI Jamison S, Usman N, Thompson J;
 XX WPI; 2003-731676/69.

XX New double-stranded short interfering nucleic acid molecule, useful for
 PT down-regulating the expression of an endogenous mammalian target gene or
 PT for treating diseases that respond to modulation of gene expression or
 PT activity.

XX Example 24; SEQ ID NO 301; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid
 CC (siNA) molecule that down-regulates expression of an endogenous mammalian
 CC target gene comprising one or more chemical modifications and each strand
 CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
 CC the invention demonstrates antiarteriosclerotic, neuroprotective,
 CC nootropic, antiparkinsonian and anticonvulsant activities and may be
 CC useful for down-regulating the expression of an endogenous mammalian
 CC target gene and therefore in the treatment of any disease or condition
 CC that responds to modulation of gene expression or activity in a cell,
 CC tissue or organism. The disease or condition may include pulmonary
 CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
 CC Parkinson's disease, epilepsy, dementia, huntington's disease or
 CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
 CC gene therapy applications. The current sequence is that of the siNA DNA-
 CC RNA hybrid of the invention.

XX Sequence 21 BP; 5 A; 4 C; 4 G; 2 T; 6 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 7.1e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1022 TCAAGCTGGCTGACTTTG 1039
 Db | ||||| ||||| |||
 18 TCAAGCTAGCAGACTTTG 1

RESULT 606
 ADG29731
 ID ADG29731 standard; RNA; 21 BP.
 XX AC ADG29731;
 XX DT 26-FEB-2004 (first entry)
 XX DE CDK2-targeted siRNA DNA-RNA hybrid - SEQ ID 297.

XX double-stranded short interfering nucleic acid; siNA;
 KW antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian;
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
 KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
 KW amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; CDK2.

XX Unidentified.
 OS Synthetic.
 XX WO2003074654-A2.
 XX 12-SEP-2003.
 XX 20-FEB-2003; 2003WO-US005028.
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX (SIRN-) SIRNA THERAPEUTICS INC.

XX Mcswiggen J, Beigelman L, Chowira B, Pavco P, Fosnaugh K;
 PI Jamison S, Usman N, Thompson J;
 XX WPI; 2003-731676/69.

XX New double-stranded short interfering nucleic acid molecule, useful for
 PT down-regulating the expression of an endogenous mammalian target gene or
 PT for treating diseases that respond to modulation of gene expression or
 PT activity.

XX Example 24; SEQ ID NO 297; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid
 CC (siNA) molecule that down-regulates expression of an endogenous mammalian
 CC target gene comprising one or more chemical modifications and each strand
 CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
 CC the invention demonstrates antiarteriosclerotic, neuroprotective,
 CC nootropic, antiparkinsonian and anticonvulsant activities and may be
 CC useful for down-regulating the expression of an endogenous mammalian
 CC target gene and therefore in the treatment of any disease or condition
 CC that responds to modulation of gene expression or activity in a cell,
 CC tissue or organism. The disease or condition may include pulmonary
 CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
 CC Parkinson's disease, epilepsy, dementia, huntington's disease or
 CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
 CC gene therapy applications. The current sequence is that of the siNA DNA-
 CC RNA hybrid of the invention.

XX Sequence 21 BP; 6 A; 4 C; 4 G; 2 T; 5 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 21;

Tue Nov 2 13:39:09 2004

QY 406 TCTCCAGTGAGAGTCGCT 423
 ID AAT02483/c
 DB 4 TCTCCAGTGAGGTCGGT 21

RESULT 609
 AAT02483/c
 ID AAT02483 standard; DNA; 22 BP.
 XX AC AAT02483;
 XX DT 13-JUN-1996 (first entry)
 XX DE Primer for domain D of the retinoid X receptor beta gene.
 XX KW Steroid/thyroid receptor superfamily; DNA-binding domain; transgenesis;
 KW retinoid X receptor; transgenic mouse; development; physiology; therapy;
 KW RXR-alpha-deficient; ventricular chamber development; ischaemia; RXR;
 KW cardiac hypertrophy; polymerase chain reaction; primer; amplification; PCR;
 KW reverse transcriptase; ss.
 XX OS Synthetic.
 XX OS Homo sapiens.
 XX PN WO9707671-A1.
 XX PD 06-MAR-1997.
 XX PP 29-AUG-1996; 96WO-JP002427.
 XX PR 29-AUG-1995; 95JP-00242340.
 XX PR 15-FEB-1996; 96JP-00027940.
 XX PA (KIRI) KIRIN BEER KK.
 XX XX Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;
 XX WPI; 1997-178822/16.
 XX PT Chimeric animal containing foreign chromosome - for expression of a
 XX PT foreign gene, e.g. an antibody.
 XX PS Example 1; Page 21; 142pp; Japanese.
 XX CC AAT02480-T02483 are amplification primers for regions of the DNA reverse
 CC transcribed by the sequence represented in AAT02479. This sequence is a
 CC sense primer corresponding to a region of domain D of the retinoid X
 CC receptor (RXR) beta gene and was used as a control. The DNA was obtained
 CC from transgenic mice that had a mutation in the RXR alpha gene. RXR is a
 CC member of the steroid/thyroid receptor superfamily. By mutating the DNA
 CC binding domain sequence in one of the steroid/thyroid receptors (e.g. the
 CC retinoid X receptor) of a mouse, a transgenic mouse expressing less than
 CC endogenous levels of the receptor in at least 1 specific tissue type can
 CC be created. The transgenic mouse can then be used as a model for
 CC determining the role of members of the steroid/thyroid receptor
 CC superfamily in development and physiology. RXR-alpha-deficient mice
 CC created in this manner allow for molecular dissection of ventricular
 CC chamber development. The mice are also useful for determining the
 CC selectivity of a ligand for a steroid/thyroid receptor. The retinoid
 CC compounds identified can be used for treating cardiac hypertrophy,
 CC ischaemia and other cardiac malfunctions
 XX Sequence 22 BP; 2 A; 11 C; 2 G; 7 T; 0 U; 0 Other;
 QY Query Match 0.8%; Score 14.8; DB 1; Length 22;
 DB Best Local Similarity 88.9%; Pred. No. 7.4e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 31 CAGAGGTAGGAGGAGGA 48
 DB 22 CAGAGGTAGGAGGAGGA 5

RESULT 610
 AAT92763
 ID AAT92763 standard; DNA; 22 BP.
 XX AC AAT92763;
 XX DT 05-FEB-1998 (first entry)
 XX DE Primer #2 for immunoglobulin kappa variable region V kappa3-2.
 XX KW PCR primer; amplification; human gene; chimeric non-human animal; antibody;
 KW transgenic mouse; chromosome fragment; hybridoma production; microcell;
 KW Huntington's disease gene; pluripotent cell; interleukin-2 gene;
 KW myeloma cell; immunoglobulin; variable region; ss.
 XX OS Synthetic.
 XX OS Homo sapiens.
 XX PN WO9707671-A1.
 XX PD 06-MAR-1997.
 XX PP 29-AUG-1996; 96WO-JP002427.
 XX PR 29-AUG-1995; 95JP-00242340.
 XX PR 15-FEB-1996; 96JP-00027940.
 XX PA (KIRI) KIRIN BEER KK.
 XX XX Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;
 XX WPI; 1997-178822/16.
 XX PT Chimeric animal containing foreign chromosome - for expression of a
 XX PT foreign gene, e.g. an antibody.
 XX PS Example 1; Page 21; 142pp; Japanese.
 XX CC AAT92758-T92817 represent amplification primers for human genes which are
 CC used in the chimeric non-human animal of the invention. The chimeric non-
 CC human animal of the invention, preferably a mouse, contains a foreign
 CC chromosome(s) or chromosome fragment. The animal is produced by obtaining
 CC a hybrid cell by fusion of a cell containing the foreign chromosome with
 CC a cell having the ability to form microcells. The microcells are
 CC prepared and fused with cells having differentiative pluripotency to
 CC form cells having differentiative pluripotency and containing the foreign
 CC chromosome. These cells are then introduced into an embryo, which is then
 CC implanted and brought to term. The foreign chromosome segment is at least
 CC 1 Mb long and preferably contains a region for an antibody. The
 CC chromosome segment could also contain genes associated with human
 CC disease, such as the interleukin-2 gene, and the Huntington's disease
 CC gene. The expression of foreign genes (especially human genes) in a non-
 CC human animal is useful for efficient production of proteins, especially
 CC of human antibodies. Particular cells of the chimeric animal which
 CC express the foreign genetic material can be isolated and fused with
 CC myeloma cells to produce hybridomas capable of expressing the foreign
 CC gene (e.g. to produce the antibody)
 XX Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
 QY Query Match 0.8%; Score 14.8; DB 1; Length 22;
 DB Best Local Similarity 88.9%; Pred. No. 7.4e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 356 CTGATGGGAGAGTGACC 373
 DB 3 CTGATGGGAGAGTGACC 20

RESULT 611
 ADG77192
 ID ADG77192 standard; DNA; 22 BP.
 XX

```

AC ADG77192;
XX
DT 11-MAR-2004 (first entry)
XX
DE Canine disease marker-related PCR primer 36.
XX
XX genetic disease; genetic trait; dog; carrier of recessive disease;
XX copper toxicosis; CT; canine genome map; breed-specific profile;
XX DNA fingerprint; dog identification; PCR; primer; ss.
XX
XX Canis familiaris.
XX
XX WO9731011-A1.
XX
XX 28-AUG-1997.
XX
XX 18-FEB-1997; 97WO-US002396.
XX
XX 22-FEB-1996; 96US-0012060P.
XX
XX (UNMI ) UNIV MICHIGAN.
XX (UNMS ) UNIV MICHIGAN STATE.
XX
XX Brewer GJ, Venta PJ, Yuzbasiyan-Gurkan V;
XX WPI; 1997-435082/40.
XX
XX New oligonucleotide primers for diagnosis of genetic diseases and traits
XX in dogs - amplify specific regions of the genome containing
XX microsatellite repeats, especially for diagnosing copper toxicosis and
XX carriers.
XX
XX Claim 1; Page 12; 40pp; English.
XX
XX This invention relates to novel oligonucleotide PCR primers which may be
XX used to identify markers associated with genetic diseases and traits in
XX dogs, in particular to diagnose genetic diseases that are not
XX phenotypically visible and to identify carriers of recessive diseases. A
XX specific application is diagnosis of copper toxicosis (CT). The invention
XX can also be used to create a genetic map of the canine genome; to
XX generate breed-specific profiles; to establish paternity and to identify
XX dogs from DNA fingerprints. The method provides rapid analysis of the
XX target sequences from only a small sample of DNA. Diagnosis can be done
XX at any time in the dog's life. The present sequence is that of a PCR
XX primer of the invention.
XX
XX Sequence 22 BP; 5 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.8; DB 1; Length 22;
XX Best Local Similarity 88.9%; Pred. No. 7.4e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1706 TGCCTACTGCTGAGCC 1723
XX Db ||||| ||| |||||
XX 5 TGCTTAAGTACTGAGCC 22
XX
XX RESULT 612
XX ADG77191
XX ID AAV52760 standard; DNA; 22 BP.
XX AC AAV52760;
XX
XX DT 27-NOV-1998 (first entry)
XX
XX DE Immunoglobulin kappa variable PCR primer VK3-2 #2.
XX
XX KW Pluripotent cell; intrinsic gene; chimeric non-human animal;
XX KW construction; human; antibiotic gene; cancer cell; embryonic; PCR primer;
XX KW ss.
XX
XX OS Synthetic.
XX OS Homo sapiens.
XX
XX PN WO9837757-A1.
XX
XX PD 03-SEP-1998.
XX
XX PF 02-MAR-1998; 98WO-JP000860.
XX
XX PR 28-FEB-1997; 97JP-00062309.
XX
XX PA (KIRI ) KIRIN BEER KK.
XX
XX PI Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;

```

XX WPI; 1998-480821/41.
DR Pluripotent cells containing foreign chromosomes or fragments - and non-
PT human chimeric animals constructed using them and expressing foreign
PT genes such as human antibiotic genes.
XX Example 1; Page 33; 217pp; Japanese.
PS
XX The present invention describes a method of obtaining pluripotent cells
CC containing foreign chromosomes or their fragments (preferably at least
CC 670 kb in length, especially more than 1000 kb) by preparing cancerous
CC cells containing the foreign chromosomes or fragments, then fusing these
CC cells with pluripotent cells such as embryonic stem cells, embryonic
CC reproductive cells, embryonic cancer cells or their mutants. Also
CC described are: (1) a method of obtaining hybridoma cells by fusing a cell
CC with a high ability to produce hybridoma cells (such as mouse A9 cells)
CC with a cell containing the foreign chromosomes or fragments (such as
CC normal human diploid cells); (2) a method of utilizing pluripotent cells
CC to produce chimeric and transgenic non-human animals (especially mammals
CC such as mice) which can express the foreign chromosomes or fragments
CC introduced; and (3) chimeric animals, their offspring and tissues and
CC cells derived from the offspring produced by a method as in (2). The
CC inventions can be used for the production of monoclonal antibodies for
CC medical use which are of human type and therefore not antigenic in
CC humans. They can also be used in the production of chimeric and
CC transgenic animals which express useful foreign proteins, or which can
CC serve as models for the study of human diseases. AAV52755 to AAV52828 are
CC PCR primers used in examples from the present invention
XX
XX Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 22;
Best Local Similarity 88.9%; Pred. No. 7.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 356 CTGATGGGAGAGTGACC 373
Db 3 CTGATGGTGAAGTGAAC 20
RESULT 614
AAAA10007
ID AAAA10007 standard; DNA; 22 BP.
XX
XX AAAA10007;
XX
DT 05-JUL-2000 (first entry)
XX
XX Primer VK3-R for human immunoglobulin gene.
XX Foreign chromosome; microcell fusion; homologous recombination; antibody;
KW targeting vector; transgenic animal; disease model; knockout animal;
KW PCR primer; human; ss.
XX
XX Homo sapiens.
OS
XX WO200010383-A1.
XX
XX 02-MAR-2000.
XX
XX 23-AUG-1999; 99WO-JP004518.
XX
XX 21-AUG-1998; 98JP-00236169.
XX
XX (KIRI) KIRIN BEER KK.
XX
XX Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;
PI Kuroiwa Y;
PI
XX WPI; 2000-246479/21.
XX
XX Producing a cell containing modified foreign chromosomes, useful for the

PT generation of transgenic animals.
XX
XX Example 95; Page 180; 316pp; Japanese.
XX
XX The invention relates to a novel method of producing cells containing a
CC modified foreign chromosome or chromosome fragment. The method comprises:
CC (a) fusing a microcell comprising the foreign chromosome or chromosome
CC fragment, with a cell having a high efficiency for homologous
CC recombination; (b) marking the desired site of insertion of the foreign
CC chromosome using a targeting vector; and (c) inducing deletion or
CC translocation at the marked site. Transgenic animals produced by the
CC method are useful to provide disease models and knockout animals, and in
CC the production of human proteins, particularly human antibodies. This
CC sequence is used in the method of the invention
XX
XX Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.8; DB 1; Length 22;
Best Local Similarity 88.9%; Pred. No. 7.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 356 CTGATGGGAGAGTGACC 373
Db 3 CTGATGGTGAAGTGAAC 20
RESULT 615
AAAA09923
ID AAAA09923 standard; DNA; 22 BP.
XX
XX AAAA09923;
XX
XX 05-JUL-2000 (first entry)
XX
XX Primer 2 for human immunoglobulin kappa variable region gene VK3-2.
XX Foreign chromosome; microcell fusion; homologous recombination; antibody;
KW targeting vector; transgenic animal; disease model; knockout animal;
KW PCR primer; human; ss.
XX
XX Homo sapiens.
OS
XX WO200010383-A1.
XX
XX 02-MAR-2000.
XX
XX 23-AUG-1999; 99WO-JP004518.
XX
XX 21-AUG-1998; 98JP-00236169.
XX
XX (KIRI) KIRIN BEER KK.
XX
XX Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;
PI Kuroiwa Y;
PI
XX WPI; 2000-246479/21.
XX
XX Producing a cell containing modified foreign chromosomes, useful for the
XX generation of transgenic animals.
XX
XX Example 1; Page 55; 316pp; Japanese.
XX
XX The invention relates to a novel method of producing cells containing a
CC modified foreign chromosome or chromosome fragment. The method comprises:
CC (a) fusing a microcell comprising the foreign chromosome or chromosome
CC fragment, with a cell having a high efficiency for homologous
CC recombination; (b) marking the desired site of insertion of the foreign
CC chromosome using a targeting vector; and (c) inducing deletion or
CC translocation at the marked site. Transgenic animals produced by the
CC method are useful to provide disease models and knockout animals, and in
CC the production of human proteins, particularly human antibodies. This
CC sequence is used in the method of the invention
XX

SQ Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 22;
Best Local Similarity 88.9%; Pred. No. 7.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 356 CTGATGGGAGAGTGACC 373
Db 3 CTGATGGTGAGAGTGAAC 20
RESULT 616
AAH39266
ID AAH39266 standard; DNA; 22 BP.
AC AAH39266;
DT 14-AUG-2001 (first entry)
DE SNP specific lower PCR primer SEQ ID 2062.
XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;
KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX Homo sapiens.
OS
XX
XX WO200129262-A2.
XX 26-APR-2001.
XX
XX 13-OCT-2000; 2000WO-US028436.
XX 15-OCT-1999; 99US-0160096P.
XX (ORCH-) ORCHID BIOSCIENCES INC.
XX Picoult-Newburg L, Pohl M;
XX WPI; 2001-290930/30.
XX
XX New genotyping oligonucleotide, useful for detecting the presence,
XX absence or identity of single polynucleotide polymorphism in a nucleic
XX acid sample.
XX Claim 1; Page 60; 83pp; English.
XX
XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
XX primer extension (SNPE) primers, and the sequences of regions flanking
XX sites of single nucleotide polymorphisms SNPs. The present invention
XX includes kits for determining the presence or absence of a SNP, using the
XX oligonucleotides of the invention. The PCR primers are used to amplify a
XX SNP flanking sequence, the SNPE primer is used as a genotyping primer.
XX The oligonucleotides are useful for genotyping a nucleic acid sample by
XX performing a single-nucleotide primer extension reaction. The
XX oligonucleotides are useful for determining the presence, absence or
XX identity of a SNP and for genotyping nucleic acid samples, for e.g. to
XX assess by association analysis the genotype of an individual or group of
XX individuals, having a pathological phenotypic trait suspected of being
XX caused by one or more SNPs. Phenotypic traits include diseases e.g.
XX agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
XX dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
XX osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
XX traits also include symptoms of or susceptibility to multifactorial
XX disease of which a component is or may be genetic such as autoimmune
XX diseases, including, rheumatoid arthritis, multiple sclerosis,
XX inflammation, cancer, nervous system diseases and infection by pathogenic
XX microorganism. The method is also useful in forensic investigations and
XX paternity analysis. The present sequence represents a PCR primer specific
XX for a human SNP containing DNA sequence

XX
SQ Sequence 22 BP; 3 A; 7 C; 2 G; 10 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 22;
Best Local Similarity 88.9%; Pred. No. 7.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1726 GTTCACCTGCCACTTGT 1743
Db 5 GTTCACCTGCCACTTTT 22
RESULT 617
AAI71720
ID AAI71720 standard; DNA; 22 BP.
XX
AC AAI71720;
DT 15-JAN-2002 (first entry)
DE PCR primer Vkappa3-R.
XX
KW PCR primer; chimeric mouse; chromosome 14; chromosome 22;
KW antibody heavy chain gene; light chain lambda gene; ss.
XX Synthetic.
OS
XX JP2001231403-A.
XX 28-AUG-2001.
XX 18-FEB-2000; 2000JP-00042074.
XX 18-FEB-2000; 2000JP-00042074.
XX (KIRI) KIRIN BREWERY KK.
XX WPI; 2001-609926/70.
XX Non-human animals maintaining a modified alien chromosome or its
XX fragment.
XX Example 9; Page 18; 43pp; Japanese.
XX
XX The present invention relates to a chimeric mouse which carries fragments
XX of human chromosomes 14 and 22. The chimeric mouse carries the complete
XX human antibody heavy chain gene from chromosome 14 and the light chain
XX lambda gene from chromosome 22. The present sequence is a PCR primer,
XX which was used in an example from the present invention
SQ Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 22;
Best Local Similarity 88.9%; Pred. No. 7.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 356 CTGATGGGAGAGTGACC 373
Db 3 CTGATGGTGAGAGTGAAC 20
RESULT 618
ABT05572/c
ID ABT05572 standard; DNA; 22 BP.
XX
AC ABT05572;
XX
DT 11-OCT-2002 (first entry)
XX
DE NOVX reverse PCR primer SEQ ID No 246.
XX
KW Cytostatic; antidiabetic; anorectic; metabolic; nootropic; antilipaeamic;
KW neuroprotective; antiparkinsonian; anticonvulsant; cerebroprotective;

KW tranquiliser; neuroleptic; antidiabetic; antiulcer; antiinflammatory;
KW anti-HIV; anti-allergic; antirheumatic; antiarthritic; NOVX; diabetes;
KW metabolic disorder; obesity; infectious disease; Alzheimer's disease;
KW anorexia; neurodegenerative disorder; Parkinson's disorder; obesity;
KW immune disorder; haematopoietic disorder; dyslipidaemia; chronic disease;
KW metabolic syndrome X; wasting disorder; cancer; neurological disorder;
KW epilepsy; stroke; mental disorder; schizophrenic disorders; goiter;
KW vesicular transport; cystic fibrosis; gastrointestinal disorder;
KW diabetes mellitus; ulcerative colitis; AIDS; allergic reaction;
KW multiple sclerosis; rheumatoid arthritis; transgenic animal;
KW gene therapy; PCR; primer; ss.

XX Unidentified.

XX WO200246409-A2.

XX 13-JUN-2002.

XX 06-DEC-2001; 2001WO-US046586.

XX 06-DEC-2000; 2000US-0251660P.

XX 12-DEC-2000; 2000US-0255029P.

XX 08-JAN-2001; 2001US-0260326P.

XX 24-JAN-2001; 2001US-0263800P.

XX 20-FEB-2001; 2001US-0269942P.

XX 24-APR-2001; 2001US-0286183P.

XX 20-AUG-2001; 2001US-0313627P.

XX 12-SEP-2001; 2001US-0318712P.

XX (CURA-) CURAGEN CORP.

XX Guo X, Li L, Patturajan M, Shimkets RA, Casman SJ, Malyankar UM;

XX Tchernev VT, Vernet CAM, Spytek KA, Shenoy SG, Boldog FL;

XX Edinger S, Peyman JA, Stone DJ, Ellerman K, Gangolli EA, Boldog FL;

XX Colman SD, Eisen AJ, Liu X, Padigaru M, Spaderan SK, Zerhusen BD;

XX WFI; 2002-547774/58.

XX Novel isolated polypeptide, designated NOVX, useful for treating or

XX preventing cancer, diabetes, obesity, dyslipidemia, anorexia, and

XX metabolic, neurodegenerative, immune and hematopoietic disorders.

XX Example 2; Page 372; 421pp; English.

XX The invention relates to an isolated polypeptide, designated NOVX,

XX comprising a sequence fully defined in the specification. The isolated

XX protein, its encoding polynucleotide or an antibody created from the

XX protein is useful in the manufacture of a medicament for treating a

XX syndrome associated with a human disease, preferably a NOVX-associated

XX disorder, or for treating or preventing a NOVX-associated disorder in a

XX subject, preferably human. The isolated protein, its encoding

XX polynucleotide or an antibody created from the protein are also useful

XX for treating or preventing metabolic disorders, diabetes, obesity,

XX infectious disease, anorexia, neurodegenerative disorder, Alzheimer's

XX disease, Parkinson's disorder, immune disorders, haematopoietic

XX disorders, and various dyslipidaemias, metabolic disturbances associated

XX with obesity, the metabolic syndrome X, wasting disorders associated with

XX chronic diseases, and cancer. The isolated protein, its encoding

XX polynucleotide or an antibody created from the protein are useful for

XX treating or preventing neurological disorders such as epilepsy, stroke,

XX mental disorders including mood, anxiety, schizophrenic disorders,

XX disorders of vesicular transport such as cystic fibrosis, diabetes

XX mellitus, goiter, gastrointestinal disorders including ulcerative

XX colitis, other conditions associated with abnormal vesicle trafficking

XX including AIDS, allergic reactions, multiple sclerosis and rheumatoid

XX arthritis. A cell comprising the vector of the invention is useful for

XX producing non-human transgenic animals. The polynucleotide of the

XX invention can be used to treat disorders by gene therapy. This

XX polynucleotide sequence represents a reverse PCR primer for the

XX amplification of a sequence relating to the NOVX proteins of the

XX invention

XX Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 22;
Best Local Similarity 88.9%; Pred. No. 7.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1230 ACAGCTACATCTTCATCTT 1247
| | | | | | | | | | | | | | | |
Db 18 ACAGCTGCGCTTCATCTT 1

RESULT 619

ADH49031

ID ADH49031 standard; DNA; 22 BP.

XX

XX ADH49031;

XX

XX 25-MAR-2004 (first entry)

XX

XX NOV18 PCR primer, SEQ ID 315.

XX

XX Human; NOVX; atherosclerosis; hypertension; cancer; cytostatic;

XX hypotensive; antiarteriosclerotic; anorectic; gene therapy; NOV18; PCR;

XX primer; ss.

XX

XX Homo sapiens.

XX

XX WO200268652-A2.

XX

XX 06-SEP-2002.

XX

XX 26-FEB-2002; 2002WO-US005910.

XX

XX 26-FEB-2001; 2001US-0271646P.

XX

XX 27-FEB-2001; 2001US-0271840P.

XX

XX 28-FEB-2001; 2001US-0272404P.

XX

XX 28-FEB-2001; 2001US-0272405P.

XX

XX 28-FEB-2001; 2001US-0272410P.

XX

XX 02-MAR-2001; 2001US-0272787P.

XX

XX 02-MAR-2001; 2001US-0272922P.

XX

XX 02-MAR-2001; 2001US-0273048P.

XX 02-MAR-2001; 2001US-0273300P.

XX 16-MAR-2001; 2001US-0276401P.

XX

XX 20-MAR-2001; 2001US-0277324P.

XX

XX 20-MAR-2001; 2001US-0278660P.

XX

XX 30-MAR-2001; 2001US-0280039P.

XX

XX 30-MAR-2001; 2001US-0280234P.

XX

XX 02-APR-2001; 2001US-0280818P.

XX

XX 12-APR-2001; 2001US-0283443P.

XX

XX 23-APR-2001; 2001US-0285754P.

XX

XX 24-APR-2001; 2001US-0286096P.

XX

XX 03-MAY-2001; 2001US-0288353P.

XX

XX 17-MAY-2001; 2001US-0291703P.

XX

XX 31-MAY-2001; 2001US-0294834P.

XX

XX 20-JUN-2001; 2001US-0299695P.

XX

XX 21-JUN-2001; 2001US-0299845P.

XX

XX 05-JUL-2001; 2001US-0303242P.

XX

XX 13-AUG-2001; 2001US-0311981P.

XX

XX 16-AUG-2001; 2001US-0312858P.

XX

XX 17-AUG-2001; 2001US-0313280P.

XX 29-AUG-2001; 2001US-0315614P.

XX

XX 17-SEP-2001; 2001US-0322818P.

XX

XX 25-FEB-2002; 2002US-00322818.

XX

XX (CURA-) CURAGEN CORP.

XX

XX Alsobrook JP, Anderson DW, Ballinger RA, Boldog FL, Burgess CE;

XX Casman SJ, Ellerman KE, Gangolli EA, Gerlach VL, Gilbert JA;

XX Gorman L, Guo X, Gusev VY, Kekuda R, Li L, Liu X, Malyankar UM;

XX Miller CE, Millet I, Padigaru M, Patturajan M, Pena CEA, Peyman JA;

XX Rastelli L, Shenoy SG, Shimkets RA, Smithson G, Spytek KA, Stone DJ;

XX Taupier RJ, Tchernev VT, Vernet CAM, Zerhusen BD;

DR WPI; 2002-698672/75.
 XX New NOVX polypeptides or polynucleotides, useful for preventing or
 PT treating disorders or syndromes e.g., atherosclerosis, hypertension,
 PT obesity or cancer.
 XX Example 2; Page 649; 923pp; English.
 XX The present invention relates to novel human NOVX proteins, where X is
 CC any number from 1 to 91 and their coding sequences (see ADH48717-
 CC ADH48930). The proteins and coding sequences are useful for preventing or
 CC treating disorders or syndromes e.g. atherosclerosis, hypertension,
 CC obesity or cancer. The present sequence was used in an example from the
 CC invention.
 XX Sequence 22 BP; 12 A; 4 C; 4 G; 2 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 14.8; DB 1; Length 22;
 Best Local Similarity 88.9%; Pred. No. 7.4e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1524 GATTGAGTACAAAGGA 1541
 DB 3 GAACAGCTACAAAGGA 20
 RESULT 620
 ABX72335
 ID ABX72335 standard; DNA; 22 BP.
 XX AC ABX72335;
 XX DT 03-JUN-2003 (first entry)
 XX DE Human NOVX DNA PCR primer #40.
 KW Human; NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;
 KW hypertension; congenital heart defect; aortic stenosis; valve disease;
 KW atrial septal defect; atrioventricular canal defect; ductus arteriosus;
 KW pulmonary stenosis; subaortic stenosis; ventricular septal defect; VSD;
 KW tuberosus sclerosis; scleroderma; atherosclerosis; infectious disease;
 KW obesity; anorexia; neurodegenerative disorder; Alzheimer's disease;
 KW Parkinson's disease; immune disorder; haematopoietic disorder; primer;
 KW haemophilia; hypercoagulation; Crohn's disease; cancer.
 OS Homo sapiens.
 XX WO200281498-A2.
 XX PD 17-OCT-2002.
 XX PF 03-APR-2002; 2002WO-US010780.
 XX PR 03-APR-2001; 2001US-0281086P.
 XX PR 03-APR-2001; 2001US-0281136P.
 XX PR 05-APR-2001; 2001US-0281863P.
 XX PR 05-APR-2001; 2001US-0281906P.
 XX PR 06-APR-2001; 2001US-0282020P.
 XX PR 10-APR-2001; 2001US-0282930P.
 XX PR 10-APR-2001; 2001US-0282934P.
 XX PR 12-APR-2001; 2001US-0283512P.
 XX PR 13-APR-2001; 2001US-0283710P.
 XX PR 17-APR-2001; 2001US-0284234P.
 XX PR 19-APR-2001; 2001US-0285325P.
 XX PR 20-APR-2001; 2001US-0285381P.
 XX PR 20-APR-2001; 2001US-0285609P.
 XX PR 23-APR-2001; 2001US-0285748P.
 XX PR 23-APR-2001; 2001US-0285890P.
 XX PR 24-APR-2001; 2001US-0286068P.
 XX PR 25-APR-2001; 2001US-0286292P.
 XX PR 27-APR-2001; 2001US-0287213P.
 XX PR 02-MAY-2001; 2001US-0288257P.
 XX PR 29-MAY-2001; 2001US-0294164P.

PR 30-MAY-2001; 2001US-0294484P.
 PR 18-JUN-2001; 2001US-0298952P.
 PR 19-JUN-2001; 2001US-0299237P.
 PR 19-JUN-2001; 2001US-0299276P.
 PR 12-SEP-2001; 2001US-0318750P.
 PR 25-SEP-2001; 2001US-0324800P.
 PR 25-SEP-2001; 2001US-0324802P.
 PR 27-SEP-2001; 2001US-0325684P.
 PR 17-OCT-2001; 2001US-0330143P.
 PR 14-NOV-2001; 2001US-0332131P.
 PR 14-NOV-2001; 2001US-0332240P.
 PR 14-NOV-2001; 2001US-0332779P.
 PR 21-NOV-2001; 2001US-0332115P.
 PR 04-DEC-2001; 2001US-0337621P.
 PR 03-JAN-2002; 2002US-0345783P.
 PR 16-JAN-2002; 2002US-0350251P.
 PR 02-APR-2002; 2002US-00114270.
 XX (CURA-) CURAGEN CORP.
 XX Guo X, Kekuda R, Miller CE, Malyankar UM, Spytek KA;
 PI Patturajan M, Liu X, Gusev VY, Li L, Vernet CAM, Zerhusen BD;
 PI Gorman L, Shenoy SG, Pena CEA, Smithson G, Burgess CE, Gerlach V;
 PI Padigaru M, Shinkets RA, Gangolli EA, Taupier RJ, Casman SJ, Ji W;
 PI Anderson DW, Leite MW, Rastelli L, Edinger SR, Stone DJ;
 PI MacDougall JR, Rothenberg ME, Mazur A, Millet I, Peyman JA;
 PI Ellerman K;
 XX WPI; 2003-046858/04.
 XX New isolated NOVX polypeptide useful for treating atherosclerosis,
 PT metabolic disorders, diabetes, obesity, infectious disease, anorexia,
 PT neurodegenerative disorders, Alzheimer's disease and cancer.
 XX Example 83; Page 416; 666pp; English.
 XX The invention relates to human polypeptides, termed NOVX, and the
 CC polynucleotides encoding them. The polypeptides and polynucleotides are
 CC useful for diagnosing disease, and screening for potential therapeutic
 CC agents. The sequences are useful for treating metabolic disorders,
 CC cardiomyopathy, diabetes, hypertension, congenital heart defects, aortic
 CC stenosis, atrial septal defect (ASD), atrioventricular canal defect,
 CC ductus arteriosus, pulmonary stenosis, subaortic stenosis, ventricular
 CC septal defect (VSD), valve diseases, tuberosus sclerosis, scleroderma,
 CC atherosclerosis, obesity, infectious disease, anorexia, neurodegenerative
 CC disorders, Alzheimer's disease, Parkinson's disease, immune disorders,
 CC haematopoietic disorders, haemophilia, hypercoagulation, Crohn's disease
 CC and cancer. This sequence represents a PCR primer used to amplify a human
 CC NOVX polynucleotide of the invention
 XX SQ Sequence 22 BP; 6 A; 8 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.8; DB 1; Length 22;
 Best Local Similarity 88.9%; Pred. No. 7.4e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 449 TCTCCACTGAGGACATCA 466
 DB 4 TCTCCACTGAGGACATCA 21
 RESULT 621
 ACD19499/C
 ID ACD19499 standard; DNA; 22 BP.
 XX AC ACD19499;
 XX DT 25-AUG-2003 (first entry)
 XX DE Novel human protein associated PCR primer #5.
 KW Human; NOV; gene therapy; endocrine related disease; diabetes;
 KW metabolism-related disease; obesity; central nervous system disorder;

KW Alzheimer's disease; Parkinson's disease; epilepsy; multiple sclerosis;
KW schizophrenia; depression; autoimmune disorder; inflammatory disorder;
KW psoriasis; allergy; lupus erythematosus; asthma; cancer;
KW inflammatory bowel disease; rheumatoid arthritis; osteoarthritis;
KW colon cancer; lung cancer; liver cancer; breast cancer; ovarian cancer;
KW prostate cancer; brain cancer; melanoma; liver disease; liver cirrhosis;
KW lung disease; emphysema; obstructive pulmonary disease; haemophilia;
KW stroke; infection; PCR; primer; ss.
XX
XX Homo sapiens.
OS
OS WO2003023002-A2.
EN
EN 20-MAR-2003.
PN
PD
XX
XX
XX 09-SEP-2002; 2002WO-US028539.
XX
XX 07-SEP-2001; 2001US-0318120P.
XX
XX 07-SEP-2001; 2001US-0318130P.
XX
XX 10-SEP-2001; 2001US-0318430P.
XX
XX 17-SEP-2001; 2001US-0322836P.
XX
XX 17-SEP-2001; 2001US-0322781P.
XX
XX 17-SEP-2001; 2001US-0322816P.
XX
XX 19-SEP-2001; 2001US-0323519P.
XX
XX 20-SEP-2001; 2001US-0323631P.
XX
XX 20-SEP-2001; 2001US-0323636P.
XX
XX 25-SEP-2001; 2001US-0324969P.
XX
XX 26-SEP-2001; 2001US-0325091P.
XX
XX 26-SEP-2001; 2001US-0324990P.
XX
XX 17-APR-2002; 2002US-037312P.
XX
XX 06-SEP-2002; 2002US-00236177.
XX
XX (CURA-) CURAGEN CORP.
XX
XX Spytek KA, Patturajan M, Gorman L, Li L, Anderson DW, Zhong M;
PI Gerlach VL, Vernet CAM, Ellerman K, Berghs C, Rothenberg ME, Guo X;
PI Shinkets RA, Leach MD, Catterton E, Kikuda R, Ji W, Miller CE;
PI Rieger DK, Taupier RU, Shenoy SG, Liu X, Padigaru M, Alsobrook JP;
PI Lepley DM, Edinger SR, Burgess CE;
XX
XX WPI; 2003-313242/30.
XX
XX New cytoplasmic, nuclear membrane bound or secreted polypeptides (NOVX)
PT and polynucleotides, useful in gene therapy, e.g. for treating or
PT preventing obesity, multiple sclerosis, allergy, cancers, hemophilia,
PT stroke or infections.
XX
XX Example 92; Page 465; 586pp; English.
XX
XX The invention describes a new isolated polypeptide (NOVX). The NOVX
CC polypeptide, nucleic acid and antibody are useful as therapeutics.
CC particularly in the manufacture of a medicament for treating a syndrome
CC associated with a human disease, which includes a pathology associated
CC with NOVX polypeptide. The DNA encoding the protein is useful in gene
CC therapy for treating the disease or condition. In particular, the NOVX
CC polypeptide or polynucleotide is useful for treating endocrine/
CC metabolism-related diseases (e.g. obesity or diabetes), central nervous
CC system disorders (e.g. Alzheimer's disease, Parkinson's disease,
CC epilepsy, multiple sclerosis, schizophrenia or depression), autoimmune
CC and inflammatory disorders (e.g. psoriasis, allergy, lupus erythematosus,
CC asthma, inflammatory bowel disease, rheumatoid arthritis or
CC osteoarthritis), cancers (e.g. colon, lung, liver, breast, ovarian,
CC prostate or brain cancers, or melanoma), liver diseases (e.g. liver
CC cirrhosis), lung diseases (emphysema or obstructive pulmonary disease),
CC haemophilia, stroke, or infections (e.g. viral, bacterial or parasitic).
CC These are also useful in developing powerful assay system for functional
CC analysis of various human disorders, as well as in diagnostic
CC applications, and for monitoring the effects of drugs during clinical
CC trials. This sequence represents a primer used to isolate DNA encoding
CC novel human NOV proteins
XX
XX Sequence 22 BP; 10 A; 7 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 22;
Best Local Similarity 88.9%; Pred. No. 7.4e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1400 TGTTCAGTTTCAGGGTC 1417
||| ||||| ||||| |||||
Db 19 TGTGTCAAGTTTCAGGGTC 2
RESULT 622
ADJ45837/c
ID ADJ45837 standard; DNA; 22 BP.
XX
XX AC ADJ45837;
XX
XX DT 06-MAY-2004 (first entry)
XX
XX Human fibrosis/scarring predisposition-related PCR primer SeqID36.
XX
XX in vitro diagnosis; inappropriate fibrosis; scarring; 16sRNA region;
KW ND2 gene; NADH-quinone oxidoreductase; complex I; cytochrome b;
KW complex III region; COI gene; cytochrome c oxidase; complex IV region;
KW mitochondrial genome; antiinflammatory; vulnery; dermatological; scar;
KW nephrotic; gene therapy; Dupuytren's disease; keloid; hypertrophic scar;
KW scleroderma; systemic sclerosis; crest syndrome; skin metabolic disorders;
KW skin patch; familial cutaneous collagenoma; skin metabolic disorders;
KW eosinophilic fascitis; discoid lupus erythematosus; dermatomyositis;
KW mixed connective tissue disease; drug-induced skin fibrosis;
KW oral submucous fibrosis; pulmonary; cardiac fibrosis; liver fibrosis;
KW cirrhosis; renal fibrosis; drug induced fibrosis;
KW central nervous system fibrosis; peripheral nervous system fibrosis;
KW vascular system fibrosis; genitourinary tract fibrosis;
KW gynaecological fibrosis; glomerulonephritis; cystic fibrosis;
KW scleroderma; myocardial fibrosis; myocardial infarction; stroke;
KW neurodegenerative disorder; human; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX WO2003039506-A2.
XX
XX 13-NOV-2003.
XX
XX 23-APR-2003; 2003WO-GB001717.
XX
XX 30-APR-2002; 2002GB-00009812.
XX
XX (RENO-) RENOVO LTD.
XX
XX Ferguson MWJ, Ollier WER, Bayat A;
XX
XX WPI; 2004-022664/02.
XX
XX In vitro diagnosing a condition due to inappropriate fibrosis or
PT scarring, e.g. Dupuytren's disease by detecting polymorphism or mutation
PT in the 16sRNA region, ND2 gene, cytochrome b region or COI gene of the
PT mitochondrial genome.
XX
XX Example 1; SEQ ID NO 36; 81pp; English.
XX
XX This invention relates to a novel method of in vitro diagnosis or
CC detection of a predisposition to a condition characterised by
CC inappropriate fibrosis or scarring comprising examining the 16sRNA
CC region, ND2 gene of NADH-quinone oxidoreductase (complex I), cytochrome b
CC (complex III) region or COI gene of Cytochrome c oxidase (complex IV)
CC region of the mitochondrial genome to detect the presence of a genetic
CC polymorphism or mutation linked to the development of the condition. The
CC invention may be useful for the development of compositions with an
CC antiinflammatory, vulnery, dermatological or nephrotic activity. In
CC addition, the sequences disclosed may prove useful for gene therapy. The
CC method, kit or delivery may be useful for diagnosing or detecting or
CC treating a predisposition to a condition characterised by inappropriate
CC fibrosis or scarring. A modulator of mitochondrial genome gene products

CC is useful in the manufacture of medicament for treating a condition
 CC characterised by fibrosis or scarring. The condition is Dupuytren's
 CC disease, keloid or hypertrophic scar, scleroderma, systemic sclerosis,
 CC crest syndrome, tuberosus sclerosis with skin patches, familial cutaneous
 CC collagenoma, metabolic disorders of the skin, eosinophilic fascitis,
 CC discoid lupus erythematosus, dermatomyositis, mixed connective tissue
 CC disease, drug-induced skin fibrosis, oral submucous fibrosis, fibrosis
 CC induced following dietary and environmental exposures, pulmonary/cardiac
 CC fibrosis, liver fibrosis/cirrhosis, renal fibrosis, drug induced
 CC fibrosis, central and peripheral nervous system fibrosis, vascular system
 CC fibrosis, male and female genitourinary tract fibrosis, gynaecological
 CC fibrosis, glomerulonephritis, myocardial fibrosis, scleroderma, myocardial
 CC fibrosis, fibrosis following myocardial infarction and central nervous
 CC system fibrosis following a stroke or neurodegenerative disorders. The
 CC present sequence is that of a PCR primer which was used for amplification
 CC of a region of the human mitochondrial genome in the exemplification of
 CC the invention.

XX Sequence 22 BP; 6 A; 3 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 22;

Best Local Similarity 88.9%; Pred. No. 7.4e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1203 CCTCTTCCGGGCTCCAC 1220

Db 18 CCTCTTACGGACTCCAC 1

RESULT 623

ADL71202/c

ID ADL71202 standard; DNA; 22 BP.

XX AC

ADL71202;

DT 20-MAY-2004 (first entry)

XX PCR primer 2 used to amplify human ABC transporter ABCB9 cDNA.

DE ABC transporter; ATP-binding cassette; leucocyte; PCR; primer; ss; human;
 XX ABCB.

XX Homo sapiens.

XX JP2004008084-A.

XX 15-JAN-2004.

XX 06-JUN-2002; 2002JP-00165863.

XX 06-JUN-2002; 2002JP-00165863.

XX (RIKO-) ZH RIKOGAKU SHINKOKAI.

XX WPI; 2004-102882/11.

XX Novel primer set useful for detecting expression of ABC transporter gene
 PT by polymerase chain reaction.

PS Claim 20; SEQ ID NO 40; 32pp; Japanese.

XX The invention relates to a novel primer set comprising oligonucleotides
 CC in which 1 or 2 base sequences are substituted to any one of 1-96 primer
 CC set. The primer set of the invention may be useful for detecting the
 CC expression of an ABC (ATP-binding cassette) transporter gene within human
 CC leucocytes by polymerase chain reaction. The current sequence is that of
 CC a PCR primer of the invention which was used to amplify human ABC
 CC transporter ABCB cDNA.

XX Sequence 22 BP; 6 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 14.8; DB 1; Length 22;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1504 TCCATATTGCACTAAAG 1521

Db 18 TACATATTGCACTGAAG 1

RESULT 624

ADM56137

ID ADM56137 standard; DNA; 22 BP.

XX AC

ADM56137;

DT 03-JUN-2004 (first entry)

XX Thale cress VIP4 probe PCR primer #3.

DE ss; PCR; vernalisation independence polypeptide; VIP4;

KW flowering regulation; flowering induction; cold response; vernalisation;
 KW transgenic plant; thale cress; primer.

XX Arabidopsis thaliana.

XX US2004033607-A1.

XX 19-FEB-2004.

XX 01-MAY-2003; 2003US-00427224.

XX 01-MAY-2002; 2002US-0376765P.

XX (VNOC/) VAN NOCKER S R.
 XX (ZHAN/) ZHANG H.

XX Van Nocker SR, Zhang H;

XX WPI; 2004-180056/17.

XX New isolated nucleic acids encoding vernalization independence genes,
 PT useful for regulating flowering, e.g. induction of flowering in response
 PT to cold or vernalization.

PS Example 1; Page 33; 67pp; English.

XX The invention relates to an isolated vernalisation independence
 CC polypeptide (VIP) operably linked to a promoter. The nucleic acids and
 CC the VIP polypeptides are useful for regulating flowering, particularly
 CC the induction of flowering in response to cold, or vernalisation. It can
 CC also be used to remove requirements for vernalisation in transgenic
 CC plants and to isolate homologous genes in other plants for similar use.
 CC The present sequence represents a thale cress vernalisation independence
 CC polypeptide, VIP4, probe PCR primer.

XX Sequence 22 BP; 9 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 14.8; DB 1; Length 22;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 666 AGGCAAAAGCAAGCTCAC 683

Db 1 AGGCAAAACACAGCTCAC 18

RESULT 625

ADK13910

ID ADK13910 standard; DNA; 22 BP.

XX AC

ADK13910;

DT 03-JUN-2004 (first entry)

XX Human methyl-CpG-binding protein 2, MECP2, PCR primer #12.

CC for subtyping or typing of HLA class I alleles. The present sequence is
CC an amplification primer used in the method
XX
SQ Sequence 20 BP; 1 A; 9 C; 6 G; 3 T; 0 U; 1 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 7.4e+02;

Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 249 TGACCTGGAGAGGCC 265

DB 20 TGHCCCGGAGAGGCC 4

RESULT 628

AA04445

ID AAX04445 standard; DNA; 21 BP.

XX AAX04445;

DT 11-MAY-1999 (first entry)

DE Human CFTR gene upstream 5' mutagenic primer.

XX Human; cystic fibrosis transmembrane conductance regulator; CFTR; PCR;
KW recombinant; expression; bacterium; homology; Pribnow box; TATA box;
KW transcription; translation; truncation; site-directed mutagenesis;
KW prokaryote; open reading frame; primer; amplification; ss.

XX Synthetic.

OS Homo sapiens.

XX US5863770-A.

XX 26-JAN-1999.

XX 21-FEB-1996; 96US-00604488.

XX 22-AUG-1989; 89US-00396894.

XX 24-AUG-1989; 89US-00399945.

XX 31-AUG-1989; 89US-00401609.

XX 21-SEP-1990; 90GB-00020632.

XX 12-APR-1993; 93US-00030081.

XX (HSCR-) HSC RES & DEV LP.

XX Tsui L, Rommens JM;

XX WPI; 1992-150482/18.

XX Modified DNA sequence - derived from gene coding for cystic fibrosis
XX transmembrane conductance regulator protein.

XX Disclosure; Fig 7; 36pp; English.

XX The invention relates to a recombinant human cystic fibrosis
XX transmembrane conductance regulator (CFTR) gene used for the expression
XX and production of the CFTR protein in bacteria. Production of the full
XX length CFTR protein in bacterial systems has been hampered by a region in
XX exon 6 which is homologous to the -35 and -10 boxes of prokaryotic
XX transcription systems, and may lead to incorrect transcription and
XX translation resulting in a truncated CFTR protein which may be toxic to
XX bacteria. The method of the invention comprises site-directed mutagenesis
XX of this region of exon 6 to remove homology with the prokaryotic
XX transcriptional start signals without affecting the encoded amino acids
XX of the reading frame. Primers AAX04445-X04448 were used for the site-
XX directed mutagenesis of exon 6

XX Sequence 21 BP; 7 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 14.6; DB 1; Length 21;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1530 GCTACAAAGAGGCCAGCCT 1550

DB 1 GCTACCAAGCAGTACAGCCT 21

RESULT 629

AAQ36678

ID AAQ36678 standard; cDNA; 21 BP.

XX AAQ36678;

DT 25-MAR-2003 (revised)

DT 09-JUN-1993 (first entry)

DE Potato PPO primer #4.

XX Polyphenol oxidase; PPO; catalyst; browning; fruit; plastid; vacuole;
KW transform; coffee; tea; black olives; grapevine; chloroplast; apple;
KW transit peptide; recombinant plasmid; PCR; primer; amplify; broad bean;
KW potato; polymerase chain reaction; ss.

XX Synthetic.

XX WO9302195-A1.

XX 04-FEB-1993.

XX 16-JUL-1992; 92WO-AU000356.

XX 17-JUL-1991; 91AU-00007248.

XX (CSIR) COMMONWEALTH SCI & IND RES ORG.

XX Robinson SP, Dry IB;

XX WPI; 1993-058792/07.

XX DNA encoding polyphenol oxidase polypeptide or fragment - useful for
XX modifying the oxidase activity in fruit and vegetables to decrease or
XX enhance browning.

XX Claim 20; Page 24; 44pp; English.

XX The sequences given in AAQ36670-78 are primers which were used in the
XX isolation and cloning of the polyphenol oxidase (PPO) enzyme genes from
XX various plants. The PPO genes were isolated, and recombinant plasmids for
XX transformation of plant cells were produced by PCR using these primers.
XX PPO is thought to be the predominant catalyst in browning of fruit caused
XX by injury or damage. PPO is localised in the plastids of plant cells
XX whereas the phenolic substrates of the enzyme are stored in the plant
XX cell vacuole. This compartmentation prevents the browning reaction from
XX occurring unless the plant cells are damaged and the enzyme and the
XX substrate are mixed. The PPO gene sequences could be used to construct
XX synthetic genes which may be used to transform plants to decrease
XX expression of the enzyme gene. In some instances, eg. coffee, tea, black
XX olives etc., it is desirable to increase the level of PPO to produce
XX desired levels of browning or changes in flavour compounds. The grapevine
XX PPO gene codes for an additional 103 amino acids upstream of the N-
XX terminus of the mature protein. This region has the properties of a
XX chloroplast transit peptide and is most likely responsible for targeting
XX of the protein to be imported into the chloroplast and processed to
XX produce mature PPO. Transformation of plants with this gene may therefore
XX result in correct targeting and maturation of the grapevine PPO in other
XX species and result in accumulation of active grapevine PPO enzyme in the
XX plastids of these tissues. (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 21 BP; 5 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 14.6; DB 1; Length 21;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

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Qy 998 TGCTCATCAAGAGGGGAG 1018
    |||||
Db 1 TGCTCATCAACTGGAGTTGAG 21

RESULT 630
AAQ61708/c
XX AAQ61708 standard; cDNA; 21 BP.
XX
XX AAQ61708;
XX
XX 25-MAR-2003 (revised)
Df 21-OCT-1994 (first entry)
XX
XX HEV strain BUR-121 primer R193.
XX
XX Hepatitis E virus; HEV; strain SAR-55; open reading frame; ORF; PCR;
XX antibody; detection; diagnosis; primates; stool suspension; amplify;
XX polymerase chain reaction; primer; burma; strain BUR-121; ss.
XX
XX Synthetic.
XX OS
XX WO9406913-A2.
XX
XX 31-MAR-1994.
XX
XX 17-SEP-1993; 93WO-US008849.
XX
XX 18-SEP-1992; 92US-00947263.
XX
XX (USSH ) US SEC DEPT HEALTH.
XX
XX Tsarev SA, Emerson SU, Purcell RH;
PI
XX WPI; 1994-118462/14.
DR
XX
XX Purified hepatitis E strain SAR-55 virus - used to develop prods. for use
PT in detection, diagnosis, vaccines and therapy of hepatitis E virus
PT infection.
XX
XX Example 1; Page 38; 114pp; English.
XX
XX The sequences given in AAQ45198-200 and AAQ61697-777 are primers which
CC were used in the isolation and amplification of the genomic sequence of
CC the hepatitis E virus (HEV) strain SAR-55. These primers were based on
CC the sequences derived from the SAR-55 strain and a strain from Burma (BUR-
CC 121). The amplified sequence contains three open reading frames (ORFs).
CC The proteins encoded by this sequence can be used to stimulate the
CC production of protective antibodies upon injection into a mammal that
CC would serve to protect the mammal upon challenge with wild type HEV. The
CC proteins can be used for detection and diagnosis of HEV infection. This
CC cDNA was isolated from primates inoculated with stool suspensions
CC obtained from hepatitis E patients. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
XX Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred.No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0

Qy 814 CACACGGGAGAGTCCCTCACC 834
    |||||
Db 21 CACACTGAGAGTGGGTATC 1

RESULT 631
AAQ95568
XX AAQ95568 standard; DNA; 21 BP.
XX
XX AAQ95568;
XX
XX 14-FEB-1996 (first entry)
Df

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PN WO9610580-A2.
XX
XX
PD 11-APR-1996.
XX
XX 03-OCT-1995; 95WO-US013102.
PF
XX 03-OCT-1994; 94US-00316765.
PR
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA
XX Tsarev SA, Emerson SU, Purcell RH;
PI
XX WPI; 1996-209320/21.
XX
XX Isolated and purified hepatitis E virus strain SAR-55 DNA - encodes
PT antigenic protein useful in diagnosis, prophylaxis and treatment of
PT hepatitis E virus infection.
XX
XX Example 1; Page 40; 121pp; English.
XX
XX The present sequence is a hepatitis E virus (HEV) strain Burma-121
CC derived primer, used in the isolation of the HEV strain SAR-55 cDNA. The
CC HEV strain SAR-55 was implicated in an enterically transmitted non-A, non
CC -B hepatitis in Pakistan. The protein encoded by the structural region of
CC the virus (i.e. ORF-2), which is capable of forming HEV like particles,
CC is useful for the detection of HEV antibodies (pref. IGG or IGM) in
CC blood, plasma, sera, cerebrospinal fluid, tissue, urine or pleural fluid.
CC The protein, and anti-HEV antibodies generated using the protein, can
CC also be used in vaccines for immunising an animal against HEV infection.
CC The protein is identified as a band of greater than 50 kD following SDS-
CC PAGE of cell lysates of insect cells infected with a HEV ORF-2 contg.
CC baculovirus, i.e. the claimed recombinant expression vectors pPIC9-1779,
CC -1780 and -1781
XX
XX Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 814 CACACGGAGAGTCCCTCACC 834
Db 21 CACACTGAGAAGTGGTCATC 1

RESULT 633
AAV71629/C
ID AAV71629 standard; DNA; 21 BP.
XX
XX AC AAV71629;
XX
XX 02-FEB-1999 (first entry)
DT
XX HEV ORF proteins encoding DNA amplifying primer R 193 B.
DE
XX Hepatitis E virus; HEV; SAR-55; diagnostic agent; vaccine; antibody;
XX passive immunisation; open reading frame; ORF; PCR primer; ss.
XX
XX Synthetic.
OS Hepatitis E virus.
XX
XX WO9846761-A1.
PN
XX 22-OCT-1998.
PD
XX 09-APR-1998; 98WO-US007418.
PF
XX 11-APR-1997; 97US-00840316.
PR
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA
XX Emerson SU, Purcell RH, Tsarev SA, Robinson RA;
PI
XX
XX

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DR WPI; 1998-568733/48.
XX
XX New hepatitis E virus DNA from Pakistani strain SAR-55 - used for, e.g.
PT developing products for diagnosis of, and vaccination against hepatitis E
PT virus infection.
XX
XX Example 1; Page 42; 204pp; English.
PS
XX Sequences AAV71605 to AAV71698 represent primers used for PCR
CC amplification of the hepatitis E virus (HEV) DNA SAR-55 encoding the open
CC reading frame (ORF) proteins ORF-1, ORF-2 and ORF-3. A host organism
CC transformed or transfected with a recombinant expression vector
CC containing the SAR-55 nucleic acid can be used to produce the HEV
CC proteins, especially ORF-2 protein. The recombinant HEV proteins can be
CC used as diagnostic agents and as vaccines for use against HEV infection.
CC The detection of antibodies specific for HEV can be used for the
CC diagnosis of infection and diseases caused by HEV, and for monitoring the
CC progression of such disease. Such methods are also useful for monitoring
CC the efficacy of therapeutic agents during the course of treatment of HEV
CC infection and disease in a mammal. The antibodies can be used for
CC detection or for passive immunisation of mammals
XX
XX Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 814 CACACGGAGAGTCCCTCACC 834
Db 21 CACACTGAGAAGTGGTCATC 1

RESULT 634
AAV38621/C
ID AAV38621 standard; DNA; 21 BP.
XX
XX AC AAV38621;
XX
XX 13-OCT-1998 (first entry)
DT
XX Human ICAM-1, E-selectin, VCAM-1 antisense oligonucleotide.
DE
XX ICAM-1; intracellular adhesion molecule-1; E-selectin; VCAM-1;
XX vascular cell adhesion molecule-1; antisense; inflammatory disease;
XX treatment; septic shock; psoriasis; wounds; burns; acne; arthritis;
XX organ rejection; inhibition; expression; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9824797-A1.
PN
XX 11-JUN-1998.
PD
XX 02-DEC-1996; 96WO-US019194.
PF
XX 02-DEC-1996; 96WO-US019194.
PR
XX (DYAD-) DYAD PHARM CORP.
PA
XX Hoke GD, Bradley MO, Williams TJ, Lee C;
XX
XX WPI; 1998-333253/29.
DR
XX Antisense oligonucleotides to ICAM-1, E-selectin or VCAM-1 - useful for
PT treating diseases having an inflammatory component, e.g. psoriasis,
PT wounds and septic shock.
XX
XX Claim 8; Page 40; 48pp; English.
PS
XX The sequence is that of an antisense oligonucleotide which is
CC substantially complementary to at least a portion of the pre- or mature

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CC RNA transcript of human intracellular adhesion molecule (ICAM), E-
CC selectin or vascular cell adhesion molecule (VCAM). It can be used to
CC inhibit expression of these proteins. Inhibition of these proteins forms
CC the basis for treatment of conditions and diseases that have an
CC inflammatory component, e.g. acne, psoriasis, arthritis, organ rejection,
CC wounds, burns, septic shock or inflammatory complications of septic shock
XX
SQ Sequence 21 BP; 3 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 225 TGAGAGTGGTGGTGGTGGCGG 245
Db 21 TGAGAGGGGAAGTGGTGGGG 1

RESULT 635

AAZ26779
ID AAZ26779 standard; DNA; 21 BP.

XX AC

XX AAZ26779;

DT 30-NOV-1999 (first entry)

XX Human polymorphic region 968.

DE Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
KW cell viability; loss of heterozygosity; precancerous condition; ASI;
KW allele specific inhibitor; somatic cell; diagnosis; prevention;
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW graft versus host disease; malignant cell removal; bone marrow; ss.

XX Homo sapiens.

XX WO9841648-A2.

XX 24-SEP-1998.

XX 19-MAR-1998; 98WO-US005419.

XX 20-MAR-1997; 97US-0041057P.

XX (VARI-) VARIAGENICS INC.

XX Housman D, Ledley FD, Stanton VP;

XX WPI; 1998-521232/44.

XX Identifying target genes for allele-specific drugs - used for diagnosis,
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
PT dysplastic lesions, endometriosis or graft versus host disease.

XX Disclosure; Fig 7; 605pp; English.

XX This invention describes a novel method for identifying an inhibitor
CC potentially useful for treatment of cancer, where the inhibitor is active
CC on a gene vital for cell growth or viability, and where the gene is
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
CC used for preventing the development of cancer in a patient having a
CC precancerous condition, by administering to the patient a first allele
CC specific inhibitor (ASI) targeted to an allele of a first essential gene
CC present in cells of the precancerous condition, where the normal somatic
CC cells of the patient are heterozygous for the first gene, the inhibitor
CC is active on at least one but less than all allelic forms of the gene
CC present in a population and targets only one allelic form present in the
CC normal somatic cells, and the first gene. The products and methods can be
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
CC graft versus host disease. The method can also be used to remove

CC malignant cells from bone marrow transplants. AAZ25812-Z26825 represent
CC human polymorphic sites described in the method of the invention
XX
SQ Sequence 21 BP; 9 A; 5 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1613 AAGCCACAGACGAGGCCCA 1633
Db 1 AAGACACAGAGAGGGGCCA 21

RESULT 636

AAZ79667/C

ID AAZ79667 standard; DNA; 21 BP.

XX AC

XX AAZ79667;

DT 12-AUG-1999 (first entry)

XX Human LKB1 gene primer/probe.

XX LKB1 gene; human; serine protease; Peutz-Jeghers syndrome; PJ syndrome;
KW variation detection; therapy; diagnosis; primer; probe; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9928459-A1.

XX 10-JUN-1999.

XX 27-NOV-1998; 98WO-JP005357.

XX 27-NOV-1997; 97JP-00344256.

XX 01-OCT-1998; 98JP-00280357.

XX (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.

XX Jenne DE, Nezu J;

XX WPI; 1999-358129/30.

XX Primers and probes for use in diagnosis of Peutz-Jeghers syndrome.

XX Claim 2; Page 95; 107pp; Japanese.

XX This sequence represents a primer/probe sequence of the invention. The
CC primer and probe sequences are derived from the sequence of the human
CC serine protease gene LKB1, and are used to detect variations in LKB1
CC leading to Peutz-Jeghers (PJ) syndrome. The primers and probes can be
CC used for the diagnosis, investigation and treatment of diseases in which
CC variations in the LKB1 gene are implicated, such as PJ syndrome

XX Sequence 21 BP; 3 A; 2 C; 10 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 814 CACACGGAGAGTCCCTCACC 834
Db 21 CACACGAGTACTCCTCACC 1

RESULT 637

AAZ09079/C

ID AAZ09079 standard; DNA; 21 BP.

XX AC

XX AAZ09079;

XX

DT 14-JUN-1999 (first entry)
 XX Tumour necrosis factor alpha antisense oligonucleotide.
 DE
 XX
 XX Tumour necrosis factor alpha; TNF-alpha; antisense oligonucleotide; ASO;
 KW inhibition; expression; treatment; disease; disorder; ss.
 XX
 XX Synthetic.
 OS Homo sapiens.
 XX WO9901139-A1.
 EN 14-JAN-1999.
 XX
 XX 02-JUL-1998; 98WO-US013711.
 PF
 XX 03-JUN-1997; 97US-0051705P.
 PR
 XX (UJJE-) UNIV JEFFERSON THOMAS.
 FA
 XX Tu G, Israel Y;
 PI WPI; 1999-105767/09.
 XX
 XX Generation of antisense oligonucleotides - by specifically targeting a
 PT GGGA motif found in mRNA sequences.
 PT
 XX Example 2; Page 37; 55pp; English.
 PS
 XX Antisense oligonucleotides (ASO) for inhibiting a tumour necrosis factor-
 CC alpha (TNF-alpha) gene in an animal, preferably a human, comprise 12-50
 CC nucleotides, 90% of which are complementary to a region of mRNA
 CC containing a GGGA sequence motif. The ASO is used to inhibit expression
 CC of a gene in an animal and for treating the animal when afflicted with a
 CC disease or disorder characterised by the presence of an mRNA from a gene
 CC containing a GGGA motif. The ASO are specifically targeted to a GGGA
 CC sequence motif found in mRNA from a gene. A study of known ASO has shown
 CC that at least half of the most efficacious ASO's contain one or more TCCC
 CC motifs. This ASO comprises a TCCC motif followed by a cytosine residue
 CC and corresponds to a region of the human ICAM-1 3' untranslated region
 XX
 XX Sequence 21 BP; 3 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 Qy 225 TGAGAGTGGTGGTGGCGG 245
 Db 21 TGAGAGGGGAAGTGGTGGGG 1
 RESULT 638
 AAZ57835
 ID AAZ57835 standard; DNA; 21 BP.
 XX
 AC AAZ57835;
 XX
 DT 11-APR-2000 (first entry)
 DE HSV-2 ICP6 gene probe used in TaqMan analysis.
 XX
 XX Fine array transcript mapping; FAT mapping; FATmap; HSV-2;
 KW differential expression; ICP6 gene; probe; ss.
 XX
 XX Herpes simplex virus 2.
 OS
 XX WO9967422-A1.
 FN 29-DEC-1999.
 XX
 PD 18-JUN-1999; 99WO-US013813.
 XX
 PF Cohen D, Blumenfeld M, Chumakov I;
 PI

PR 24-JUN-1998; 98US-0090464P.
 XX (SMIK) SMITHKLINE BEECHAM CORP.
 XX
 PI Leary JJ, Tal-Singer R;
 XX WPI; 2000-147217/13.
 DR
 XX Novel analytical method designated Fine Array Transcript Mapping, useful
 PT for detecting and measuring RNA molecules transcribed from a genome,
 PT differential expression, and sequence mapping.
 XX
 XX Example 1; Page 17; 53pp; English.
 XX
 CC This sequence represents a probe targeted at the ICP6 gene of herpes
 CC simplex virus type 2 (HSV-2) SB5 (AICC VR 2546). It was used as a TaqMan
 CC probe in quantitative analysis of the HSV-2 genome. The invention provides
 CC a novel genetic analysis method termed Fine Array Transcript Mapping (FAT
 CC Mapping) for detecting and measuring RNA molecules transcribed from a
 CC genome, differential expression, and mapping of the 5' sequence of a
 CC transcript. FAT mapping involves probing a test grid containing an array
 CC of 100s to 1000s of overlapping genomic clones or DNA fragments with
 CC probes consisting of labeled cDNAs representing the RNA transcripts from
 CC test populations. The system allows quantitative measurements of the
 CC expression of rare transcripts, and enables the analysis of 100s of genes
 CC within a genomic sequence in a single run. The method can be used to
 CC measure the differential expression of transcripts between 2 or more
 CC different viral, tissue or cell populations which share a common genomic
 CC sequence, or to determine whether a particular open reading frame is
 CC expressed under certain conditions. The FATMap technique has been applied
 CC to the HSV-2 genome
 XX
 SQ Sequence 21 BP; 4 A; 10 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 Qy 550 AAGCCCTCAGCCGCGCTC 570
 Db 1 AAGCCCTGATCCGCCACC 21
 RESULT 639
 AAZ5780
 ID AAZ5780 standard; DNA; 21 BP.
 XX
 AC AAZ5780;
 XX
 DT 10-SEP-2001 (first entry)
 XX
 DE Human biallelic marker downstream amplification primer SEQ ID NO:10136.
 XX
 KW Human genome; biallelic marker; high density disequilibrium map;
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
 KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO9954500-A2.
 PD 28-OCT-1999.
 XX
 PF 21-APR-1999; 99WO-IB000822.
 XX
 XX 21-APR-1998; 98US-0082614P.
 PR 23-NOV-1998; 98US-0109732P.
 XX
 XX (GEST) GENSET.
 PA
 PI Cohen D, Blumenfeld M, Chumakov I;

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XX WPI; 2000-013267/01.
DR
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 9; Page 2391; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 21 BP; 8 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1060 ATCCCAACAAGACATACCTCC 1080
DB 1 ATCCCTACAGAGATAATCC 21
RESULT 640
AAZ73450/c
ID AAZ73450 standard; DNA; 21 BP.
XX
AC AAZ73450;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:7806.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
XX
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST ) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 9; Page 1895; 2745pp; English.
XX
```

```
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 21 BP; 2 A; 1 C; 9 G; 9 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 429 CAACCATCCCCACCCAGAT 449
DB 21 CAACCAACCCACACTCAAGAT 1
RESULT 641
AAC80113/c
ID AAC80113 standard; DNA; 21 BP.
XX
AC AAC80113;
XX
DT 03-MAY-2001 (first entry)
XX
DE Reverse primer #25 used for amplification of HLA-A exon 2.
XX
KW HLA-A; HLA-B; HLA-C; typing; primer; human; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO2000061795-A2.
XX
PD 19-OCT-2000.
XX
PF 05-APR-2000; 2000WO-EP002998.
XX
PR 09-APR-1999; 99EP-00870068.
PR 11-JUN-1999; 99US-0138614P.
XX
PA (INNO-) INNOGENETICS NV.
XX
PI De Canck I, Rombout A, Rossau R;
XX
DR WPI; 2000-647426/62.
XX
PT Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4
PT of human leukocyte antigen (HLA) -A, HLA-B, or HLA-C alleles using defined
PT primer sets, useful for subtyping or typing of HLA Class I alleles.
XX
PS Claim 4; Page 35; 128pp; English.
XX
CC The present invention relates to a method for the locus-specific,
CC separate amplification of exon 2, exon 3, and/or exon 4 of human
CC leukocyte antigen (HLA) -A, HLA-B, or HLA-C alleles. The method is useful
CC for subtyping or typing of HLA class I alleles. The present sequence is
CC an amplification primer used in the method
XX
SQ Sequence 21 BP; 1 A; 9 C; 7 G; 3 T; 0 U; 1 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 7.7e+02;
```

```
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 249 TGACCTGGAGAGGCC 265
    ||:|||||
Db 21 TGHCCCGGAGAGGCC 5

RESULT 642
AAC92275/c
ID AAC92275 standard; DNA; 21 BP.
XX
AC AAC92275;
XX
DT 22-MAR-2001 (first entry)
XX
DE Mouse LKB1 PCR primer SEQ ID NO:7.
XX
KW Mouse; LKB1; gene knockout animal; LKB1 gene disruption; cancer;
KW Peutz-Jeghers syndrome; serine/threonine kinase; STK11; tumour;
KW PCR primer; ss.
XX
OS Mus musculus.
XX
PN WO200072670-A1.
XX
PD 07-DEC-2000.
XX
PF 31-MAY-2000; 2000WO-JP003504.
XX
PR 31-MAY-1999; 99JP-00153030.
XX
PA (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
PA (CHUS ) CHUGAI SEIYAKU KK.
XX
PI Nezu J, Ose A, Jishage K, Jenne DE;
XX
DR WPI; 2001-061412/07.
XX
PT Knockout mammal for LKB1 (STK11) gene for the investigation of and
PT development of treatments for cancer and Peutz-Jeghers syndrome.
XX
PS Example 1; Page 13; 75pp; Japanese.
XX
CC The present invention describes a knockout mammal for the serine/
CC threonine kinase gene LKB1 (also known as STK11), in which all or part of
CC the gene or its expression regulating region is deleted. Also described
CC are: (1) cells which have the potential to differentiate, from the
CC knockout mammal, in which expression of the intrinsic LKB1 gene is
CC suppressed; and (2) producing the animal in which these cells are
CC inserted into an isolated embryo of the mammal, which is then implanted
CC into a false-pregnancy host female and brought to term. The knockout
CC mammal can be used in the investigation of the onset mechanism of
CC diseases in which LKB1 defects are implicated, including many tumours and
CC Peutz-Jeghers syndrome. It can also be used in the development of
CC remedies and treatment methods for these diseases, including the
CC screening of substances for their use in treatment and prevention. The
CC knockout mice may have LKB1 suppression which is time or tissue specific.
CC The present sequence represents a PCR primer used in the amplification of
CC mouse LKB1, which is used in an example from the present invention
XX
SQ Sequence 21 BP; 3 A; 2 C; 10 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 814 CACACGGAGAGTCCCTCACC 834
    |||||
Db 21 CACACGAGTACTCCATCACC 1

RESULT 643
AAF96555
```

```
ID AAF96555 standard; DNA; 21 BP.
XX
AC AAF96555;
XX
DT 06-JUN-2001 (first entry)
XX
DE Human gene single nucleotide polymorphism #1316.
XX
KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(11,G)
FT FT /*tag= a
FT FT /standard_name= "single nucleotide polymorphism"
XX
PN WO200118250-A2.
XX
PD 15-MAR-2001.
XX
PF 07-SEP-2000; 2000WO-US024503.
XX
PR 10-SEP-1999; 99US-0153357P.
PR 26-JUL-2000; 2000US-0220947P.
PR 16-AUG-2000; 2000US-0225724P.
XX
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;
XX
DR WPI; 2001-226749/23.
XX
PT Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX
PS Example; Page 139; 242pp; English.
XX
CC The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 494 TCCGGCTGCTGAGGCTACC 514
    |||||
Db 1 TGCTGCTGCTGAGTACTACC 21

RESULT 644
AAF96059
ID AAF96059 standard; DNA; 21 BP.
XX
AC AAF96059;
XX
```

DT 06-JUN-2001 (first entry)
 XX Human gene single nucleotide polymorphism #820.
 DE
 XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
 KW polymorphism; vascular disease; coronary artery disease; forensics;
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
 KW pulmonary embolism; paternity test; ds.
 XX Homo sapiens.
 OS
 XX Key Location/Qualifiers
 PH replace(11,C)
 FT /tag= a
 FT /standard_name= "single nucleotide polymorphism"
 XX
 XX WO200118250-A2.
 PN
 XX 15-MAR-2001.
 PD
 XX 07-SEP-2000; 2000WO-US024503.
 PF
 XX 10-SEP-1999; 99US-0153357P.
 PR 26-JUL-2000; 2000US-0220947P.
 PR 16-AUG-2000; 2000US-0225724P.
 XX
 XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA (MILL-) MILLENNIUM PHARM INC.
 PA
 XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JU;
 PI WPI; 2001-226749/23.
 XX
 XX Nucleic acids comprising single nucleotide polymorphisms, useful in
 PT applications such as forensics, paternity testing, medicine, genetic
 PT analysis and phenotype correlations to diseases such as diabetes and
 PT atherosclerosis.
 XX
 PS Example; Page 105; 242pp; English.
 XX
 XX The present invention provides a method of diagnosing a vascular disease
 CC in an individual, involving determining the sequence at various
 CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
 CC genes. The sequences at a number of polymorphic sites are also provided
 CC in the specification. In particular, the method can be used in the
 CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
 CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
 CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
 CC useful in forensics, paternity testing, genetic analysis and phenotype
 CC correlations to diseases. The present sequence is an example of one of
 CC the human gene SNPs shown in the specification
 XX
 SQ Sequence 21 BP; 2 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 OY 1028 TGGCTGACCTTGGCCCTGGGCC 1048
 Db 1 TGCCTGACTTTGATGGGCC 21
 RESULT 645
 ID AAF96318
 XX AAF96318 standard; DNA; 21 BP.
 AC AAF96318;
 XX
 XX 06-JUN-2001 (first entry)
 DT Human gene single nucleotide polymorphism #1079.
 DE
 XX

KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
 KW polymorphism; vascular disease; coronary artery disease; forensics;
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
 KW pulmonary embolism; paternity test; ds.
 XX Homo sapiens.
 OS
 XX Key Location/Qualifiers
 PH replace(11,T)
 FT /tag= a
 FT /standard_name= "single nucleotide polymorphism"
 XX
 XX WO200118250-A2.
 PN
 XX 15-MAR-2001.
 PD
 XX 07-SEP-2000; 2000WO-US024503.
 PF
 XX 10-SEP-1999; 99US-0153357P.
 PR 26-JUL-2000; 2000US-0220947P.
 PR 16-AUG-2000; 2000US-0225724P.
 XX
 XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA (MILL-) MILLENNIUM PHARM INC.
 PA
 XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JU;
 PI WPI; 2001-226749/23.
 XX
 XX Nucleic acids comprising single nucleotide polymorphisms, useful in
 PT applications such as forensics, paternity testing, medicine, genetic
 PT analysis and phenotype correlations to diseases such as diabetes and
 PT atherosclerosis.
 XX
 PS Example; Page 126; 242pp; English.
 XX
 XX The present invention provides a method of diagnosing a vascular disease
 CC in an individual, involving determining the sequence at various
 CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
 CC genes. The sequences at a number of polymorphic sites are also provided
 CC in the specification. In particular, the method can be used in the
 CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
 CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
 CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
 CC useful in forensics, paternity testing, genetic analysis and phenotype
 CC correlations to diseases. The present sequence is an example of one of
 CC the human gene SNPs shown in the specification
 XX
 SQ Sequence 21 BP; 5 A; 9 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 OY 1379 GGGCCGACCTCTCTCACCACG 1399
 Db 1 GGGCCGAGCCCGACACCAAGC 21
 RESULT 646
 ID AAF97060/c
 XX AAF97060 standard; DNA; 21 BP.
 AC AAF97060;
 XX
 XX 06-JUN-2001 (first entry)
 DT Human gene single nucleotide polymorphism #1821.
 DE
 XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
 KW polymorphism; vascular disease; coronary artery disease; forensics;
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
 KW pulmonary embolism; paternity test; ds.

```

XX OS Homo sapiens.
XX PH
XX FT Key Location/Qualifiers
XX FT Variation replace(11,A)
XX FT /*tag= a
XX FT /standard_name= "single nucleotide polymorphism"
XX PN WO200118250-A2.
XX ED 15-MAR-2001.
XX PF 07-SEP-2000; 2000WO-US024503.
XX PR 10-SEP-1999; 99US-0153357P.
XX PR 26-JUL-2000; 2000US-0220947P.
XX PR 16-AUG-2000; 2000US-0225724P.
XX PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX PA (MILL-) MILLENNIUM PHARM INC.
XX PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX WPI; 2001-226749/23.
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX applications such as forensics, paternity testing, medicine, genetic
XX analysis and phenotype correlations to diseases such as diabetes and
XX atherosclerosis.
XX Example; Page 169; 242pp; English.
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification
XX SQ Sequence 21 BP; 7 A; 1 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1683 CTACATCTTCCTGCTTACTC 1703
Db 21 CCACATCTTCATGATTACTC 1
RESULT 647
AAAF28957/c
ID AAF28957 standard; DNA; 21 BP.
XX AC AAF28957;
XX 18-JUN-2002 (first entry)
XX DE Equine GM-CSF gene 5' RACE primer JP730.
XX Immunostimulatory; granulocyte-macrophage colony stimulating factor;
XX horse; reverse transcriptase PCR; colony formation; blood; cytotoxicity;
XX inflammation; vector; adjuvant; immunogen; vaccination; vaccine; ss;
XX equine herpes; tetanus; Borrelia burgdorferi; rabies; 5'RACE; primer.
XX OS Equus sp.
XX FN WO200077210-A1.

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XX PD 21-DEC-2000.
XX PF 08-JUN-2000; 2000WO-FR001590.
XX PR 10-JUN-1999; 99US-0138843P.
XX PA (MERI-) MERIAL.
XX PI Bublot M, Perez JM, Andreoni CMP;
XX WPI; 2001-080689/09.
XX Novel DNA encoding equine granulocyte-macrophage colony-stimulating
XX factor, useful as adjuvant for vaccines and as non-specific
XX immunostimulant.
XX Example 2; Page 13; 34pp; French.
XX The invention relates to the isolation of the sequence of the gene
XX encoding a horse granulocyte-macrophage colony stimulating factor (GM-CSF
XX ; AAF28953). The gene was isolated from horse lymphocytes by using a 5'
XX and 3' RACE (rapid amplification of cDNA ends) method followed by a
XX reverse transcriptase (RT) PCR method. The sequence shown here represents
XX the 5' RACE primer JP730 used to isolate the 5' end of the equine GM-CSF
XX gene. GM-CSF induces colony formation in various types of blood cells and
XX particularly induces cytotoxicity of macrophages; stimulates antibody-
XX dependent cytotoxicity, and causes recruitment of leucocytes to sites of
XX inflammation. Vectors containing the gene or the protein itself, are
XX useful as adjuvants in immunogenic or vaccinating compositions for
XX horses, e.g. for protection against equine herpes, tetanus, Borrelia
XX burgdorferi, rabies etc. Also as non-specific stimulators of the immune
XX system. In a specific example, plasmid pJF097, containing the sequence
XX for equine GM-CSF was used to transform CHO-K1 cells and the
XX transformants grown for 48 hours. The culture supernatant was then added
XX to culture medium being used to grow porcine bone marrow cells. After 14
XX days, the mean number of colonies per culture box was 12-15, compared
XX with none for cells grown in absence of GM-CSF. Equine GM-CSF allows a
XX reduction in the amount of immunogenic/vaccinating component required,
XX and may induce a response in animals that would otherwise be non-
XX responders
XX SQ Sequence 21 BP; 3 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 618 CATTAGCTGGACAAACTGGG 638
Db 21 CCTGAGCTGTACACAGGG 1
RESULT 648
AAH78643
ID AAH78643 standard; DNA; 21 BP.
XX AC AAH78643;
XX 10-DEC-2001 (first entry)
XX DE PCR primer for mechanically sensitive potassium channel gene fragment.
XX Human; mechanically sensitive potassium channel; riluzole; TWICK;
XX polyunsaturated fatty acid; arachidonic acid; hTRAAK; chromosome 11q13;
XX neuronal excitation; muscle excitation; cardiac rhythm; anoxia;
XX hormone secretion; cardiac disease; vascular disease; ischemia;
XX nervous system disorder; endocrinal disease; muscle disease;
XX retinal disease; epilepsy; cardiac arrhythmia; neurodegeneration;
XX PCR primer; ss.
XX OS Homo sapiens.
XX FN

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```

PN WO200168670-A2.
XX
PD 20-SEP-2001.
XX
XX 14-MAR-2001; 2001WO-FR000758.
PF
XX 14-MAR-2000; 2000FR-00003264.
PR
XX (CNRS ) CNRS CENT NAT RECH SCI.
PA
XX Lazdunski M, Lesage F, Maingret F;
PI
XX WPI; 2001-590037/66.
DR
XX
XX New mechanically sensitive potassium channel, useful for treating
PT cardiovascular diseases and in drug screening, is activated by
PT polyunsaturated fatty acids.
XX
XX Disclosure; Page 15; 37pp; French.
PS
XX
CC PCR primers AAH78642-43 were used to amplify a gene fragment of the human
CC mechanically sensitive potassium channel gene. The channel is activated
CC by polyunsaturated fatty acids (particularly arachidonic acid (AA)) and
CC by riluzole. The polypeptide is designated human TWICK-related AA-
CC activated potassium channel (hTRAAK). The hTRAAK gene is located on
CC chromosome 11q13. hTRAAK is involved in regulation of neuronal and muscle
CC excitation, cardiac rhythm and secretion of hormones. Cells that express
CC hTRAAK, designated to screen for modulators of hTRAAK activity. Such
CC modulators are potentially useful for prevention or treatment, in humans
CC and animals, of: cardiac and/or vascular disease; nervous system
CC disorders associated with ischemia and anoxia; endocrinal diseases
CC associated with anomalous hormone secretion or muscle diseases; and
CC retinal diseases. Typical examples are epilepsy, cardiac arrhythmia and
CC neurodegeneration
XX
SQ Sequence 21 BP; 3 A; 7 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1273 GAGACGTGGCCAGGCATCTG 1293
Db ||| ||||| |||||
1 GAGGCCCGCCAGGCATCTG 21

RESULT 649
AAH78640
ID AAH78640 standard; DNA; 21 BP.
AC AAH78640;
XX
XX 10-DEC-2001 (first entry)
DT
DE PCR primer for mechanically sensitive potassium channel gene fragment.
XX
XX Human; mechanically sensitive potassium channel; riluzole; TWICK;
KW polyunsaturated fatty acid; arachidonic acid; hTRAAK; chromosome 11q13;
KW neuronal excitation; muscle excitation; cardiac rhythm; anoxia;
KW hormone secretion; cardiac disease; vascular disease; ischemia;
KW nervous system disorder; endocrinal disease; muscle disease;
KW retinal disease; epilepsy; cardiac arrhythmia; neurodegeneration;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX WO200168670-A2.
PN
XX 20-SEP-2001.
PD
XX 14-MAR-2001; 2001WO-FR000758.
PF
XX 14-MAR-2000; 2000FR-00003264.
PR
XX (CNRS ) CNRS CENT NAT RECH SCI.
PA
XX Lazdunski M, Lesage F, Maingret F;
PI
XX WPI; 2001-590037/66.
DR
XX
XX New mechanically sensitive potassium channel, useful for treating
PT cardiovascular diseases and in drug screening, is activated by
PT polyunsaturated fatty acids.
XX
XX Disclosure; Page 15; 37pp; French.
PS
XX
CC PCR primers AAH78639-40 were used to amplify a gene fragment of the human
CC mechanically sensitive potassium channel gene. The channel is activated
CC by polyunsaturated fatty acids (particularly arachidonic acid (AA)) and
CC by riluzole. The polypeptide is designated human TWICK-related AA-
CC activated potassium channel (hTRAAK). The hTRAAK gene is located on
CC chromosome 11q13. hTRAAK is involved in regulation of neuronal and muscle
CC excitation, cardiac rhythm and secretion of hormones. Cells that express
CC hTRAAK, designated to screen for modulators of hTRAAK activity. Such
CC modulators are potentially useful for prevention or treatment, in humans
CC and animals, of: cardiac and/or vascular disease; nervous system
CC disorders associated with ischemia and anoxia; endocrinal diseases
CC associated with anomalous hormone secretion or muscle diseases; and
CC retinal diseases. Typical examples are epilepsy, cardiac arrhythmia and
CC neurodegeneration
XX
SQ Sequence 21 BP; 3 A; 7 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1273 GAGACGTGGCCAGGCATCTG 1293
Db ||| ||||| |||||
1 GAGGCCCGCCAGGCATCTG 21

RESULT 650
AAH40014
ID AAH40014 standard; DNA; 21 BP.
AC AAH40014;
XX
XX 14-AUG-2001 (first entry)
DT
DE SNP specific lower PCR primer SEQ ID 2810.
XX
XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;
KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX WO200129262-A2.
PN
XX 26-APR-2001.
PD
XX 13-OCT-2000; 2000WO-US028436.
PF
XX 15-OCT-1999; 99US-0160096P.
PR
XX (ORCH-) ORCHID BIOSCIENCES INC.
PA
XX Picoult-Newburg L, Pohl M;
PI
XX WPI; 2001-290930/30.
DR
XX
XX New genotyping oligonucleotide, useful for detecting the presence,
PT

```

PT absence or identity of single polynucleotide polymorphism in a nucleic
XX acid sample.

PS Claim 1; Page 64; 83pp; English.

XX
CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
CC primer extension (SNPE) primers, and the sequences of regions flanking
CC sites of single nucleotide polymorphisms SNPs. The present invention
CC includes kits for determining the presence or absence of a SNP, using the
CC oligonucleotides of the invention. The PCR primers are used to amplify a
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.
CC The oligonucleotides are useful for genotyping a nucleic acid sample by
CC performing a single-nucleotide primer extension reaction. The
CC oligonucleotides are useful for determining the presence, absence or
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC assess by association analysis the genotype of an individual or group of
CC individuals, having a pathological phenotypic trait suspected of being
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC traits also include symptoms of or susceptibility to multifactorial
CC disease of which a component is or may be genetic such as autoimmune
CC diseases, including, rheumatoid arthritis, multiple sclerosis,
CC inflammation, cancer, nervous system diseases and infection by pathogenic
CC microorganism. The method is also useful in forensic investigations and
CC paternity analysis. The present sequence represents a PCR primer specific
CC for a human SNP containing DNA sequence

SQ Sequence 21 BP; 5 A; 3 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 223 GATGACAGTGGTGGTGGTGGC 243

Db 1 GATGACAGAGGTGGTCATGGC 21

RESULT 651

AA08565/c

ID RAD08585 standard; DNA; 21 BP.

XX AAD08585;

XX 04-SEP-2001 (first entry)

XX Primer PHN33881, to identify proteins that interact with maize NPRI.

XX Maize; NPRI-interacting protein; disease resistance; sequence shuffling;
XX transgenic plant; signal transduction pathway; primer; ss.

XX Zea mays.

XX WO200146423-A2.

XX 28-JUN-2001.

XX 19-DEC-2000; 2000WO-US034524.

XX 21-DEC-1999; 99US-0171691P.

XX (PION-) PIONEER HI-BRED INT INC.

XX Crane EH;

XX WPI; 2001-408649/43.

XX Novel maize NPRI-interacting polynucleotide, useful for engineering
XX plants with improved disease resistance by increasing sensitivity or
XX capacity of signal transduction pathway and for sequence shuffling.

XX

PS Example 1; Page 57; 69pp; English.

XX
CC The invention relates to NPRI-interacting proteins and nucleic acids
CC encoding them. NPRI-interacting DNA is useful for modulating the level of
CC NPRI-interacting protein in plants such as maize, soybean etc. By
CC manipulating NPRI-interacting DNA in maize or in other plants, the plant
CC can be engineered to improve resistance to pathogens by increasing the
CC sensitivity or capacity of the signal transduction pathway. The plants
CC containing altered NPRI expression are useful as universal disease
CC susceptible plants. NPRI-interacting DNA is further useful for sequence
CC shuffling. They are also used as probes. The invention also provides
CC transgenic plants with increased disease resistance. The present sequence
CC is an internal primer used to identify proteins that interact with NPRI

SQ Sequence 21 BP; 7 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 821 AGAAGTCCCTCACCCCTTGCT 841

Db 21 AGAAGTCGCTCTCTCTTGCT 1

RESULT 652

ABA01357

ID ABA01357 standard; RNA; 21 BP.

XX AC ABA01357;

XX 03-JUL-2002 (first entry)

XX YMDD oligonucleotide #17.

XX Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.

XX Simian immunodeficiency virus.

XX US6303295-B1.

XX 16-OCT-2001.

XX 12-JUL-1996; 96US-00679493.

XX 14-JUL-1995; 95US-0001203P.

XX 01-SEP-1995; 95US-0003112P.

XX (UYGE-) UNIV GEORGIA RES FOUND INC.

XX Taylor EW, Nadimpalli RG, Ramanathan CS;

XX WPI; 2002-024734/03.

XX New selenoprotein for use in detecting certain viruses, e.g. human
XX immunodeficiency virus (HIV) or Ebola, cancer and immune system
XX disorders.

XX Disclosure; Col 69-70; 140pp; English.

XX The present invention relates to selenoproteins encoded in the genome of
XX a virus, where the coding sequence of the selenoprotein is genetically
XX engineered for expression in a nucleic acid construct. The invention also
XX discloses a method for identifying selenoprotein coding sequences, for
XX detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
XX disorders. The present sequence was used to illustrate the invention

SQ Sequence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 61.9%; Pred. No. 7.7e+02;
Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;


```
QY 862 CTGAAGCAGTACTGGATGAC 882
Db 1 CUGAUCCAAUACAUGGAUGAC 21

RESULT 653
ID ABA01358
AC ABA01358;
XX 03-JUL-2002 (first entry)
DT 03-JUL-2002 (first entry)
DE YMDD oligonucleotide #18.
KW Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
XX Simian immunodeficiency virus.
XX US6303295-B1.
PN 16-OCT-2001.
XX 12-JUL-1996; 96US-00679493.
XX 14-JUL-1995; 95US-0001203P.
PR 01-SEP-1995; 95US-0003112P.
XX (UYGE-) UNIV GEORGIA RES FOUND INC.
PA Taylor EW, Nadimpalli RG, Ramanathan CS;
XX WPI; 2002-024734/03.
DR New selenoprotein for use in detecting certain viruses, e.g. human
XX immunodeficiency virus (HIV) or Ebola, cancer and immune system
PT disorders.
XX Disclosure; Col 69-70; 140pp; English.
CC The present invention relates to selenoproteins encoded in the genome of
CC a virus, where the coding sequence of the selenoprotein is genetically
CC engineered for expression in a nucleic acid construct. The invention also
CC discloses a method for identifying selenoprotein coding sequences, for
CC detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
CC disorders. The present sequence was used to illustrate the invention
XX Sequence 21 BP; 8 A; 4 C; 4 G; 0 T; 5 U; 0 Other;
PS Query Match 0.8%; Score 14.6; DB 1; Length 21;
XX Best Local Similarity 61.9%; Pred. No. 7.7e+02;
XX Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

QY 862 CTGAAGCAGTACTGGATGAC 882
Db 1 CUGAUCCAAUACAUGGAUGAC 21

RESULT 654
ID ABA01359
AC ABA01359;
XX 03-JUL-2002 (first entry)
DT 03-JUL-2002 (first entry)
DE YMDD oligonucleotide #19.
KW Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
XX Simian immunodeficiency virus.
XX US6303295-B1.
PN 16-OCT-2001.
XX 12-JUL-1996; 96US-00679493.
XX 14-JUL-1995; 95US-0001203P.
PR 01-SEP-1995; 95US-0003112P.
XX (UYGE-) UNIV GEORGIA RES FOUND INC.
PA Taylor EW, Nadimpalli RG, Ramanathan CS;
XX WPI; 2002-024734/03.
DR New selenoprotein for use in detecting certain viruses, e.g. human
XX immunodeficiency virus (HIV) or Ebola, cancer and immune system
PT disorders.
XX Disclosure; Col 69-70; 140pp; English.
CC The present invention relates to selenoproteins encoded in the genome of
CC a virus, where the coding sequence of the selenoprotein is genetically
CC engineered for expression in a nucleic acid construct. The invention also
CC discloses a method for identifying selenoprotein coding sequences, for
CC detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
CC disorders. The present sequence was used to illustrate the invention
XX Sequence 21 BP; 8 A; 4 C; 4 G; 0 T; 5 U; 0 Other;
PS Query Match 0.8%; Score 14.6; DB 1; Length 21;
XX Best Local Similarity 61.9%; Pred. No. 7.7e+02;
XX Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

QY 862 CTGAAGCAGTACTGGATGAC 882
Db 1 CUGAUCCAAUACAUGGAUGAC 21

RESULT 655
ID ABA01355
AC ABA01355;
XX 03-JUL-2002 (first entry)
DT 03-JUL-2002 (first entry)
DE YMDD oligonucleotide #15.
XX Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
XX Simian immunodeficiency virus.
XX US6303295-B1.
PN 16-OCT-2001.
XX 12-JUL-1996; 96US-00679493.
XX 14-JUL-1995; 95US-0001203P.
PR 01-SEP-1995; 95US-0003112P.
XX (UYGE-) UNIV GEORGIA RES FOUND INC.
PA Taylor EW, Nadimpalli RG, Ramanathan CS;
XX WPI; 2002-024734/03.
DR New selenoprotein for use in detecting certain viruses, e.g. human
XX immunodeficiency virus (HIV) or Ebola, cancer and immune system
PT disorders.
XX Disclosure; Col 69-70; 140pp; English.
CC The present invention relates to selenoproteins encoded in the genome of
CC a virus, where the coding sequence of the selenoprotein is genetically
CC engineered for expression in a nucleic acid construct. The invention also
CC discloses a method for identifying selenoprotein coding sequences, for
CC detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
CC disorders. The present sequence was used to illustrate the invention
XX Sequence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
PS Query Match 0.8%; Score 14.6; DB 1; Length 21;
XX Best Local Similarity 61.9%; Pred. No. 7.7e+02;
XX Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;
```

CC The present invention relates to selenoproteins encoded in the genome of
 CC a virus, where the coding sequence of the selenoprotein is genetically
 CC engineered for expression in a nucleic acid construct. The invention also
 CC discloses a method for identifying selenoprotein coding sequences, for
 CC detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
 CC disorders. The present sequence was used to illustrate the invention
 XX
 SQ Sequence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 61.9%; Pred. No. 7.7e+02;
 Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

QY 862 CTGAAGCAGTACCTGGATGAC 882
 Db 1 CUGAUCACAGUAGUGAUGAC 21

RESULT 656

ABA01365
 ID ABA01365 standard; RNA; 21 BP.

XX ABA01365;

XX 07-AUG-2003 (revised)
 DT 03-JUL-2002 (first entry)

XX YMDD oligonucleotide #25.

XX Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.

XX Mouse mammary tumor virus.

XX US6303295-B1.

XX 16-OCT-2001.

XX 12-JUL-1996; 96US-00679493.

XX 14-JUL-1995; 95US-0001203P.

XX 01-SEP-1995; 95US-0003112P.

XX (UYGE-) UNIV GEORGIA RES FOUND INC.

XX Taylor EW, Nadimpalli RG, Ramanathan CS;

XX WPI; 2002-024734/03.

XX New selenoprotein for use in detecting certain viruses, e.g. human
 PT immunodeficiency virus (HIV) or Ebola, cancer and immune system
 PT disorders.

XX Disclosure; Col 69-70; 140pp; English.

XX The present invention relates to selenoproteins encoded in the genome of
 CC a virus, where the coding sequence of the selenoprotein is genetically
 CC engineered for expression in a nucleic acid construct. The invention also
 CC discloses a method for identifying selenoprotein coding sequences, for
 CC detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
 CC disorders. The present sequence was used to illustrate the invention.
 CC (Updated on 07-AUG-2003 to correct OS field.)

XX Sequence 21 BP; 5 A; 5 C; 6 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 61.9%; Pred. No. 7.7e+02;
 Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

QY 862 CTGAAGCAGTACCTGGATGAC 882
 Db 1 CUGAUCACAGUAGUGAUGAC 21

RESULT 657

AAD30438

ID AAD30438 standard; DNA; 21 BP.

XX AAD30438;

XX 21-MAY-2002 (first entry)

XX Human androgen receptor (AR) polyglycine tract encoding DNA.

XX Human; AIB1; amplified in breast cancer 1; androgen receptor; AR;
 KW prostate cancer; polyglycine; ds.

XX Homo sapiens.

XX WO200210452-A2.

XX 07-FEB-2002.

XX 27-JUL-2001; 2001WO-US023834.

XX 27-JUL-2000; 2000US-0221074P.

XX (UYRP) UNIV ROCHESTER.

XX Chang C;

XX WPI; 2002-206195/26.

XX Assessing the risk of acquiring or developing prostate cancer in a human
 PT subject, comprises determining the length of the contiguous CAG, CAA
 PT and/or GGN repeats in the AIB1 gene and/or androgen receptor gene of the
 PT subject.

XX Example 2; Page 45; 86pp; English.

XX The invention relates to a method for assessing the risk of prostate
 CC cancer in a human subject. The method involves determining the length of
 CC the contiguous CAG or CAA repeats in both AIB1 (Amplified in Breast
 CC cancer 1) gene alleles or contiguous CAG, CAA or GGN repeats in the
 CC androgen receptor gene of the subject. The method is useful for assessing
 CC a subject's risk for acquiring or developing prostate cancer. The present
 CC sequence is a DNA encoding human androgen receptor (AR) polyglycine
 CC tract. This sequence is used in the molecular analysis and assessment of
 CC the CAG and GGN repeat of AR gene

XX Sequence 21 BP; 0 A; 1 C; 15 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 232 GGTGGTGGTGGCGGCGAGTGAC 252
 Db 1 GGTGGTGGTGGCGGCGAGTGAC 21

RESULT 658

ABK53794/c

ID ABK53794 standard; DNA; 21 BP.

XX ABK53794;

XX 05-JUN-2002 (first entry)

XX DMS:acceptor oxidoreductase, PCR primer #40.

XX DMS:acceptor oxidoreductase; dimethyl sulphide; sulphoxide;
 KW prochiral organic sulphide; sulphoxide enantiomer; primer;
 KW chiral drug production; optically-active functional drug; ss.
 XX Rhodovulum sulfidophilum.

PN WO200216570-A1.
 XX
 PD 28-FEB-2002.
 XX
 PF 21-AUG-2001; 2001WO-AU001033.
 XX
 PR 21-AUG-2000; 2000AU-00009559.
 XX
 PA (UYQU) UNIV QUEENSLAND.
 XX
 XX Mcdevitt CA, Mcewan AG;
 PI
 XX WPI; 2002-280922/32.
 DR
 XX
 XX New recombinant dimethyl sulfide:acceptor oxidoreductase or its subunits,
 PT useful for oxidizing prochiral organic sulfides to form sulfoxide
 PT enantiomers for chiral drug synthesis.
 XX
 XX Claim 15; Page 46; 66pp; English.
 PS
 CC The invention relates to a recombinant dimethyl sulphide (DMS):acceptor
 CC oxidoreductase (I) or its subunit selected from recombinant alpha, beta,
 CC delta and gamma subunits. (I) is useful for oxidising prochiral organic
 CC sulphides to form sulfoxide enantiomers for chiral drug synthesis. (I)
 CC is expressed in a transformed bacterium. The enantiomer formed is useful
 CC for producing a chiral drug. (I) is useful for synthesis of optically-
 CC active functional groups of drug. DNA encoding (I) is useful for
 CC producing a strain of DMS:acceptor oxidoreductase- deficient Rhodovulum
 CC sulfidophilum, which is useful in whole-cell reaction, where DMS:acceptor
 CC oxidoreductase activity is unwanted. ABK53751-ABK53805 represent R.
 CC sulfidophilum DMS:acceptor oxidoreductase subunit coding sequences and
 CC PCR primers of the invention
 XX
 SQ Sequence 21 BP; 3 A; 11 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 346 AAGATGGGGTCTGATGGGGAG 366
 Db 21 ATGATGGGACGCGATGCGGAG 1
 RESULT 659
 ABQ74754/C
 ID ABQ74754 standard; DNA; 21 BP.
 XX
 AC ABQ74754;
 XX
 DT 24-OCT-2002 (first entry)
 XX
 XX Human TNFR2 forward PCR primer SEQ ID NO:4.
 XX
 XX Tumour necrosis factor receptor 2; TNFR2; antisense oligonucleotide;
 KW PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN US6410324-B1.
 XX
 PD 25-JUN-2002.
 XX
 PF 27-APR-2001; 2001US-00844634.
 XX
 PR 27-APR-2001; 2001US-00844634.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 XX Bennett CF, Watt AT;
 PI
 DR WPI; 2002-606814/65.
 XX

PT New compounds antisense to nucleic acid encoding human or mouse tumor
 PT necrosis factor receptor 2 are useful to treat disease associated with
 PT mouse tumor necrosis factor receptor 2 expression.
 XX
 PS Example 13; Col 44; 69pp; English.
 XX
 CC The present invention describes compounds of 8-30 nucleobases antisense
 CC to a nucleic acid encoding human or mouse tumour necrosis factor receptor
 CC 2 (TNFR2). Also described is a method for inhibiting expression of human
 CC or mouse TNFR2 comprising contacting cells or tissues in vitro with one
 CC of the claimed compounds. The antisense compounds are used to treat a
 CC disease or condition associated with expression of TNFR2. The present
 CC sequence represents a PCR primer for human TNFR2, which is used in an
 CC example from the present invention
 XX
 SQ Sequence 21 BP; 4 A; 11 C; 0 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 338 AGGACTTGAAGATGGGGTCTG 358
 Db 21 AGGAATTGAAGTGGGGAGTG 1
 RESULT 660
 ADH49177
 ID ADH49177 standard; DNA; 21 BP.
 XX
 AC ADH49177;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE NOV68 PCR primer, SEQ ID 461.
 XX
 KW Human; NOV6; atherosclerosis; hypertension; obesity; cancer; cytostatic;
 KW hypotensive; antiarteriosclerotic; anorectic; gene therapy; NOV68; PCR;
 KW primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200268652-A2.
 XX
 PD 06-SEP-2002.
 XX
 PF 26-FEB-2002; 2002WO-US005910.
 XX
 PR 26-FEB-2001; 2001US-0271646P.
 PR 27-FEB-2001; 2001US-0271840P.
 PR 28-FEB-2001; 2001US-0272404P.
 PR 28-FEB-2001; 2001US-0272405P.
 PR 28-FEB-2001; 2001US-0272410P.
 PR 28-FEB-2001; 2001US-0272414P.
 PR 02-MAR-2001; 2001US-0272787P.
 PR 02-MAR-2001; 2001US-0272922P.
 PR 02-MAR-2001; 2001US-0273048P.
 PR 02-MAR-2001; 2001US-0273300P.
 PR 16-MAR-2001; 2001US-0276401P.
 PR 20-MAR-2001; 2001US-0277324P.
 PR 20-MAR-2001; 2001US-0278660P.
 PR 30-MAR-2001; 2001US-0280039P.
 PR 30-MAR-2001; 2001US-0280234P.
 PR 02-APR-2001; 2001US-0280818P.
 PR 12-APR-2001; 2001US-0283443P.
 PR 23-APR-2001; 2001US-0285754P.
 PR 24-APR-2001; 2001US-0286096P.
 PR 03-MAY-2001; 2001US-0288353P.
 PR 17-MAY-2001; 2001US-0291703P.
 PR 31-MAY-2001; 2001US-0294834P.
 PR 20-JUN-2001; 2001US-0299695P.
 PR 21-JUN-2001; 2001US-0299845P.
 PR 05-JUL-2001; 2001US-0303242P.

PR 13-AUG-2001; 2001US-0311981P.
 PR 16-AUG-2001; 2001US-0312858P.
 PR 17-AUG-2001; 2001US-0313280P.
 PR 29-AUG-2001; 2001US-0315614P.
 PR 17-SEP-2001; 2001US-0322818P.
 PR 25-FEB-2002; 2002US-00322818.
 XX
 PA (CURA-) CURAGEN CORP.
 XX
 PI Alsobrook JP, Anderson DW, Ballinger RA, Boldog FL, Burgess CE;
 PI Casman SU, Ellerman KE, Gangolli EA, Gerlach VL, Gilbert JA;
 PI Gorman L, Guo X, Gusev VY, Kekuda R, Li L, Liu X, Malyankar UM;
 PI Miller CB, Millet I, Padigaru M, Patturajan M, Pena CEA, Peyman JA;
 PI Rastelli L, Shenoy SG, Shinkets RA, Smithson G, Spytek KA, Stone DJ;
 PI Taupier RJ, Tchernev VT, Vernet CM, Zerhusen BD;
 XX
 DR WPI; 2002-698672/75.
 XX
 XX New NOVX polypeptides or polynucleotides, useful for preventing or
 PT treating disorders or syndromes e.g., atherosclerosis, hypertension,
 PT obesity or cancer.
 XX
 XX Example 2; Page 833; 923pp; English.
 XX
 CC The present invention relates to novel human NOVX proteins, where X is
 CC any number from 1 to 91 and their coding sequences (see ADH48717-
 CC ADH48930). The proteins and coding sequences are useful for preventing or
 CC treating disorders or syndromes e.g. atherosclerosis, hypertension,
 CC obesity or cancer. The present sequence was used in an example from the
 CC invention.
 XX
 XX Sequence 21 BP; 8 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 331 GTGCGACGACGACITGAAGATG 351
 Db 1 GTGCAAGAGGACAGGAGATG 21
 RESULT 661
 ADB92791/c
 ID ADB92791 standard; DNA; 21 BP.
 XX
 AC ADB92791;
 XX
 XX 04-DEC-2003 (first entry)
 DT
 DE Human OCT1 consensus binding site EMSA probe top strand, OCT1 P.
 XX
 XX Inflammatory bowel disease; Crohn's disease; ulcerative colitis; TNF;
 KW tumour necrosis factor; polymorphism; haplotype; diagnosis; Caucasian;
 KW antiinflammatory; gene therapy; TNF antagonist; OCT1; EMSA;
 KW electrophoretic mobility shift assay; probe; ss.
 XX
 OS Synthetic.
 XX
 XX WO2003031651-A2.
 PN
 XX
 PD 17-APR-2003.
 XX
 PF 09-OCT-2002; 2002WO-GB0004582.
 XX
 XX 10-OCT-2001; 2001GB-00024315.
 PR
 XX (OXAG-) OXAGEN LTD.
 PA
 XX Van Heel D, Lench N;
 PI
 XX WPI; 2003-393451/37.
 DR
 XX

PT Determining the susceptibility of a Caucasian subject to inflammatory
 PT bowel disease such as Crohn's disease, comprises screening the genetic
 PT material of the subject to determine which allele of the TNF -857C/T
 PT polymorphism is present.
 XX
 PS Example; Page 19; 39pp; English.
 XX
 CC The invention relates to a method for determining the susceptibility of
 CC an individual to inflammatory bowel disease. The method comprises
 CC screening the genetic material of the individual to determine which
 CC allele of the TNF (tumour necrosis factor) -857C/T polymorphism is
 CC present. The invention also relates to a method of determining the
 CC susceptibility to, or confirming the diagnosis of, Crohn's disease in a
 CC Caucasian individual comprising screening the genetic material of the
 CC subject for the presence of the TNF -1031C/-863C/-857C/-308G haplotype.
 CC The invention additionally encompasses gene therapy for Crohn's disease
 CC in a Caucasian with the -1031C/-863C/-857C/-308G haplotype, comprising
 CC the introduction of genetic material comprising the TNF -1031T, -863T, -
 CC 857T, and/or -308A alleles. The invention further discloses methods for
 CC preventing TNF production for the treatment of inflammatory bowel
 CC disease. Inflammatory bowel disease (IBD) is a chronic inflammatory
 CC disease of the bowel gastrointestinal tract, and can exist as either
 CC ulcerative colitis, or as Crohn's disease. The invention is based on the
 CC discovery that the TNF haplotype -1031C/-863C/-857C/-308G haplotype
 CC confers susceptibility to Crohn's disease in Caucasians. The TNF -857
 CC allele acts independently of the known NOD2 gene polymorphisms
 CC (Arg702Trp, Gly908Arg, and Ileu1007 Phe) which also confer
 CC susceptibility to inflammatory bowel disease, and certain embodiments of
 CC the invention involve additional determination of these NOD2
 CC polymorphisms. The methods are useful for determining susceptibility of a
 CC (Caucasian) subject to inflammatory bowel disease, such as ulcerative
 CC colitis or Crohn's disease. The methods are also useful for confirming
 CC the diagnosis of a Caucasian subject as having Crohn's disease, or for
 CC determining the response of a patient to treatment. The agents and the
 CC genetic material, comprising TNF -1031T, -863T, -857T and/or -308A
 CC alleles, or TNF -1031T/-863T/-857T/-308A haplotype, are useful in
 CC manufacturing a medicament for preventing or treating Crohn's disease in
 CC a Caucasian subject. Sequences ADB92791-ADB92792 represent the top and
 CC bottom strands of a consensus OCT1 binding site EMSA (electrophoretic
 CC mobility shift assay) probe used in the example of the invention. OCT1 is
 CC a transcription factor for TNF.
 XX
 SQ Sequence 21 BP; 7 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1506 CATATTTCGACTAAAGGAGAT 1526
 Db 21 CCTATTTCGATTAAAGGAGCT 1
 RESULT 662
 ADB79190/c
 ID ADB79190 standard; DNA; 21 BP.
 XX
 AC ADB79190;
 XX
 XX 04-DEC-2003 (first entry)
 DT
 DE Nucleic acid encoding caspase-2 protease cleavage signal.
 XX
 XX Protease; immunomodulator; antigen; antigen-presenting cell; reporter;
 KW ds.
 KW
 OS Unidentified.
 XX
 XX WO2003065977-A2.
 PN
 XX 14-AUG-2003.
 PD
 XX 20-NOV-2002; 2002WO-US037123.
 PF

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XX 20-NOV-2001; 2001US-0331928P.
XX (DAND ) DANA FARBER CANCER INST.
PA Hirano N, Butler M, Nadler LM;
XX WPI; 2003-636934/60.
XX New vertebrate cell comprising a nucleic acid encoding an exogenous
PT antigen-presenting molecule or encoding a fusion polypeptide comprising
PT an antigen, useful for preparing a composition for modulating an immune
PT response.
XX Disclosure; Page 36; 91pp; English.
XX The invention relates to a new vertebrate cell. This cell comprises a
CC nucleic acid encoding an exogenous antigen-presenting molecule or a
CC fusion polypeptide. The polypeptide consists of an antigen fused in frame
CC at its N-terminus to a heterologous reporter polypeptide, where the
CC antigen is presented at the cell surface by the exogenous antigen-
CC presenting molecule, where the vertebrate cell functions as a
CC professional antigen presenting cell. The vertebrate cell further
CC comprises a nucleic acid encoding an exogenous immunoregulatory molecule.
CC It is a human immortalised cell. It comprises a dendritic cell, a
CC macrophage, a B cell, a mast cell, a parenchymal cell, a Kupffer cell or
CC a fibroblast cell. The antigen is fused to the heterologous reporter
CC polypeptide through a linker polypeptide. It is located at the C terminus
CC of the fusion polypeptide. The linker is cleavable by a cell-associated
CC protease, which is an endogenous protease or an exogenous protease
CC expressed by the nucleic acid encoding an antigen fused in frame at its N
CC terminus to a heterologous reporter polypeptide is 8 to 10 amino acids in
CC length. The nucleic acid encoding an exogenous antigen-presenting
CC molecule encodes a class I molecule, which is an HLA or H-2 molecule. The
CC heterologous reporter polypeptide comprises a Green Fluorescent Protein.
CC It comprises a portion of a cell surface protein that is expressed on the
CC surface of a cell. It comprises a polypeptide which permits the cell to
CC survive in selective medium. The cell surface protein that is expressed
CC on the surface of a cell permits the selection of cells expressing the
CC reporter polypeptide by binding to an antibody specific for the cell
CC surface protein. The immunoregulatory molecule comprises a costimulatory
CC molecule, an accessory molecule, a cytokine, a chemokine and/or an
CC adhesion molecule. The costimulatory molecule is CD80 or CD83. The
CC antigen is a tumour-specific antigen. The vertebrate cell comprising a
CC nucleic acid encoding an exogenous antigen-presenting molecule or
CC encoding a fusion polypeptide comprising an antigen, is useful for
CC preparing a composition for modulating an immune response. The current
CC sequence represents a nucleic acid sequence encoding a caspase-2 protease
CC cleavage signal. Such a protease is useful to the invention for cleaving
CC the antigenic peptide from the heterologous polypeptide at the linker
XX sequence.
XX Sequence 21 BP; 2 A; 5 C; 11 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 372 CCAGGCTTCAGGCAGCTCCTC 392
DB 21 CCAGCGTCGGCCAGCTCCAC 1
RESULT 663
ADC64462
ID ADC64462 standard; DNA; 21 BP.
XX ADC64462;
AC ADC64462;
XX 18-DEC-2003 (first entry)
DT 18-DEC-2003
XX Rat ERK-3 designed oligonucleotide probe, E13, #2.
```

```
XX Rat; ss; antibody; extracellular signal regulated kinase-5; hERK-5; ERK;
KW mitogen activated protein kinase; MAP kinase; hybridoma;
KW diabetes mellitus; Alzheimer's disease; peripheral neuropathy;
KW gene therapy; antidiabetic; neuroprotective; ERK-3; probe.
XX Synthetic.
OS Rattus sp.
XX US6579972-B1.
XX 17-JUN-2003.
XX 09-SEP-1999; 99US-00393212.
XX 19-MAR-1993; 93US-00029404.
XX 02-JUN-1995; 95US-00459953.
XX (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
XX Lechner C, Moller NP, Ullrich A;
XX WPI; 2003-634515/60.
XX New antibody, useful for preparing a composition for treating
PT extracellular signal regulated kinase - 5-associated diseases in a mammal
PT e.g., diabetes mellitus, Alzheimer's disease or peripheral neuropathies.
XX Example 1; Col 38; 40pp; English.
XX The invention discloses a new antibody comprising a specific binding
CC affinity to the human extracellular signal regulated kinase (hERK)-5
CC protein. ERKs are also referred to as mitogen activated protein (MAP)
CC kinases. The hybridoma that produces the monoclonal antibody is also
CC claimed. The antibody is useful for preparing a composition for treating
CC hERK-5-associated diseases e.g. diabetes mellitus, Alzheimer's disease or
CC peripheral neuropathies in a mammal. The polynucleotide encoding the
CC protein is also useful for treating these diseases using gene therapy
CC techniques. The sequence presented is an oligonucleotide probe, version
CC #2, which corresponds to a region of the rat ERK-3 coding sequence, and
CC ERK3 to detect the human ERK-5 cDNA clone.
XX Sequence 21 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 4 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 66.7%; Pred. No. 7.7e+02;
Matches 14; Conservative 4; Mismatches 3; Indels 0; Gaps 0;
QY 1156 ATGTGGGTGTGGGTGCATC 1176
DB 1 AYATGTGGCTRGGTGCATC 21
RESULT 664
ADD35311/c
ID ADD35311 standard; DNA; 21 BP.
XX ADD35311;
AC ADD35311;
XX 15-JAN-2004 (first entry)
DT 15-JAN-2004
XX Human KIAA0172 associated primer #12.
DE human; KIAA0172; cancer; ss; PCR; primer.
KW Homo sapiens.
OS Homo sapiens.
XX JP2002369696-A.
XX 24-DEC-2002.
XX 01-APR-2002; 2002JP-00099422.
XX
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XX 30-MAR-2001; 2001JP-00101401.
 XX (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.
 PA (INFO-) INFO GENES CO LTD.
 PA (KAZU-) ZH KAZUSA DNA KENKYUSHO.
 XX WPI; 2003-495749/47.
 XX Human KIAA0172 gene encoding a sequence of 1194 amino acids, useful for
 PT diagnosis and treatment of cancer and for development of effective growth
 PT inhibitors of cancer cells.
 XX Example 3; SEQ ID NO 47; 40pp; Japanese.
 XX The invention relates to new human KIAA0172 gene. The KIAA0172 gene and
 CC polypeptide are useful for detection and treatment of cancer. The present
 CC sequence represents KIAA0172 associated primer.
 XX
 SQ Sequence 21 BP; 10 A; 0 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1679 CCAACTACATCTTCCCTGCTT 1699
 DB 21 CCAACTACCTTTCTCTCTT 1
 RESULT 665
 ADJ99056/c
 ID ADJ99056 standard; DNA; 21 BP.
 XX
 AC ADJ99056;
 XX
 DT 06-MAY-2004 (first entry)
 DE Human cyp2D6 probe G1749C-WT+4.
 XX
 XX detection; probe; microarray; hybridisation; cyp2D6; human;
 KW cytochrome-P450; ss.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "5'-NH2 modification"
 XX
 PN DE10201463-A1.
 XX
 FD 24-JUL-2003.
 XX
 XX 16-JAN-2002; 2002DE-01001463.
 XX
 XX 16-JAN-2002; 2002DE-01001463.
 XX
 PA (CLON-) CLONDIAG CHIP TECHNOLOGIES GMBH.
 XX
 PI Schulz T, Ermantraut E, Ehricht R, Moebius KP, Wagner G;
 PI Fischer J, Ellinger T;
 XX WPI; 2003-698569/67.
 XX
 XX Reaction vessel, useful for detecting a specific interaction between a
 PT target and probe, e.g. in medical tests, comprises at its base a carrier
 PT for immobilized probes.
 XX
 XX Example 2; Page 20; 38pp; German.
 PS
 XX This invention describes a novel reaction vessel for detecting specific

CC interactions between molecular targets and probe molecules comprising a
 CC laboratory reaction vessel (tube) that has, on its base, a carrier on
 CC which probe molecules are immobilised in predetermined regions. The base
 CC includes an opening for receiving the carrier and is optically
 CC transparent in the region of the detection surface. The carrier is made
 CC of glass and/or silicon and the vessel is made of glass (optionally
 CC coated with plastics), glass ceramic, plastics or metal. Probes are
 CC present in a substance library, especially proteins (e.g. antibodies,
 CC receptors and/or membrane proteins), peptides (receptor ligands,
 CC pharmacologically active peptides and/or hormones) or nucleic acids (DNA
 CC and/or RNA). The detection system is a camera, especially a charge-
 CC coupled device or CMOS camera, optionally fitted with an optical read-out
 CC system. The device may include a light source that ensures homogeneous
 CC illumination of the carrier, especially an array of diffusely irradiating
 CC sources that are superimposed. These sources are lasers, LED, plane
 CC radiators or high-pressure lamps and the cover of the reaction vessel is
 CC structured to ensure homogeneous illumination. The system preferably also
 CC contains optical filters and optionally a filter exchanger, a
 CC 'semipermeable' mirror between light sources and the carrier, a
 CC temperature control unit and a computer that collects signal intensities
 CC from the detector and converts them to an analogue image. The reaction
 CC vessel is in direct contact with the detector and many reaction vessels
 CC are arranged for sequential examination. Target molecules are contacted
 CC with probes and any interaction detected, e.g. from conventional labels
 CC but most preferably the interaction results in precipitation on the array
 CC of probes and the time progression of precipitation is detected as a
 CC signal intensity. Particularly a soluble precursor is converted into a
 CC metallic precipitate, particularly reduction of a silver salt (nitrate,
 CC lactate, acetate or tartrate) by formaldehyde or hydroquinone.
 CC Preparation may occur in the presence of a metal (especially gold)
 CC clusters or colloidal particles, coupled to the target, and precipitation
 CC is detected by reflection, absorption or scattering of a light beam
 CC passed through the precipitate. The new vessel is used as a component in
 CC a device for performing microarray tests, i.e. interaction of a target
 CC with protein, peptide or nucleic acid probes, e.g. for biomedical,
 CC including hybridisation or immunological, tests. The reaction vessel is
 CC of simple construction, is easy and inexpensive to make and is compatible
 CC with other laboratory apparatus (e.g. bench centrifuges and pipettes).
 CC Micro-array tests can be performed in a single vessel, reducing the risk
 CC of contamination and only relatively simple detectors are required.
 CC ADJ99048-ADJ99087 represent probes used to detect the cyp2D6 gene which
 CC encodes human cytochrome-P450 and are used to illustrate the method of
 CC the invention.
 XX
 SQ Sequence 21 BP; 3 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1588 TTCCGCTGTGTGACACCGAG 1608
 DB 21 TTCCGCAAGTGTGACACCGAG 1
 RESULT 666
 ADJ13037/c
 ID ADJ13037 standard; DNA; 21 BP.
 XX
 XX AC ADJ13037;
 XX
 XX 20-MAY-2004 (first entry)
 DT Human DNA probe used to immobilise CpG methylated DNA SeqID 164.
 XX
 DE probe; ss; chemical modification; methylation; array; CpG island;
 KW tumour suppressor; pl6; human; H69; H1618.
 XX
 OS Homo sapiens.
 XX
 PN US2003152950-A1.
 PD 14-AUG-2003.

```
XX 27-JUN-2002; 2002US-00184085.
XX
XX 27-JUN-2001; 2001US-0301370P.
XX
XX (GARN/) GARNER H R.
XX (MINN/) MINNA J D.
XX (LUEB/) LUEBKE K J.
XX (BALO/) BALOG R P.
XX
XX Garner HR, Minna JD, Luebke KJ, Balog RP;
XX WPI; 2003-874843/81.
XX
XX Analysis of chemical modification of DNA involves obtaining sample of DNA
XX to be analyzed, treating DNA with chemical reagents that result in
XX different base sequences, and determining sequence of resulting DNA.
XX
XX Example 1; SEQ ID NO 164; 210pp; English.
XX
XX This invention relates to a novel method for analysing chemically
XX modified macromolecules. Specifically, it refers to a high throughput
XX method for the parallel analysis of many potential sites of chemical
XX modification (e.g. methylation) in DNA. The present invention describes
XX treating the DNA with one or more chemical reagents that result in
XX different base sequences depending upon the presence or absence of the
XX modification of interest. Accordingly, a device comprising an array of
XX probes is provided to hybridise with and select the altered DNA sequences
XX that comprise the modifications of interest such as a CpG island. In
XX particular, this invention refers to analysing the methylation pattern of
XX a region of the promoter for the tumour suppressor gene p16 from two
XX human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
XX is a human DNA probe used to immobilise CpG methylated DNA of the
XX invention.
XX
XX Sequence 21 BP; 3 A; 12 C; 0 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 221 TCGATCAGAGTGGTGGTGGT 241
Db ||||| ||||| |||||
21 TGGATCAGAGCGGAGAGGCG 1
RESULT 667
ADJ13737/c
ID ADJ13737 standard; DNA; 21 BP.
XX
XX AC ADJ13737;
XX
XX DT 20-MAY-2004 (first entry)
XX
XX DE Human DNA probe used to immobilise CpG methylated DNA SeqID 864.
XX
XX KW probe; ss; chemical modification; methylation; array; CpG island;
XX tumour suppressor; p16; human; H69; H1618.
XX
XX OS Homo sapiens.
XX
XX PN US2003152950-A1.
XX
XX PD 14-AUG-2003.
XX
XX PF 27-JUN-2002; 2002US-00184085.
XX
XX PR 27-JUN-2001; 2001US-0301370P.
XX
XX PA (GARN/) GARNER H R.
XX (MINN/) MINNA J D.
XX (LUEB/) LUEBKE K J.
XX (BALO/) BALOG R P.
XX
XX PI Garner HR, Minna JD, Luebke KJ, Balog RP;
XX WPI; 2003-874843/81.
XX
XX Analysis of chemical modification of DNA involves obtaining sample of DNA
XX to be analyzed, treating DNA with chemical reagents that result in
XX different base sequences, and determining sequence of resulting DNA.
XX
XX Example 1; SEQ ID NO 164; 210pp; English.
XX
XX This invention relates to a novel method for analysing chemically
XX modified macromolecules. Specifically, it refers to a high throughput
XX method for the parallel analysis of many potential sites of chemical
XX modification (e.g. methylation) in DNA. The present invention describes
XX treating the DNA with one or more chemical reagents that result in
XX different base sequences depending upon the presence or absence of the
XX modification of interest. Accordingly, a device comprising an array of
XX probes is provided to hybridise with and select the altered DNA sequences
XX that comprise the modifications of interest such as a CpG island. In
XX particular, this invention refers to analysing the methylation pattern of
XX a region of the promoter for the tumour suppressor gene p16 from two
XX human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
XX is a human DNA probe used to immobilise CpG methylated DNA of the
XX invention.
XX
XX Sequence 21 BP; 3 A; 12 C; 0 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 221 TCGATCAGAGTGGTGGTGGT 241
Db ||||| ||||| |||||
21 TGGATCAGAGCGGAGAGGCG 1
RESULT 667
ADJ13737/c
ID ADJ13737 standard; DNA; 21 BP.
XX
XX AC ADJ13737;
XX
XX DT 20-MAY-2004 (first entry)
XX
XX DE Human DNA probe used to immobilise CpG methylated DNA SeqID 864.
XX
XX KW probe; ss; chemical modification; methylation; array; CpG island;
XX tumour suppressor; p16; human; H69; H1618.
XX
XX OS Homo sapiens.
XX
XX PN US2003152950-A1.
XX
XX PD 14-AUG-2003.
XX
XX PF 27-JUN-2002; 2002US-00184085.
XX
XX PR 27-JUN-2001; 2001US-0301370P.
XX
XX PA (GARN/) GARNER H R.
XX (MINN/) MINNA J D.
XX (LUEB/) LUEBKE K J.
XX (BALO/) BALOG R P.
```

PS Example 1; SEQ ID NO 200; 210pp; English.

XX This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene p16 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the invention.

XX SQ Sequence 21 BP; 3 A; 12 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 221 TGGATGAGAGTGGTGGTGGTG 241
|||||
Db 21 TGGATGAGAGCGGAGAGGTG 1

RESULT 669
ADJ13109/c
ID ADJ13109 standard; DNA; 21 BP.
XX
XX AC ADJ13109;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human DNA probe used to immobilise CpG methylated DNA SeqID 236.
XX probe; ss; chemical modification; methylation; array; CpG island;
XX tumour suppressor; p16; human; H69; H1618.
XX Homo sapiens.
XX OS
XX US2003152950-A1.
XX
XX 14-AUG-2003.
XX
XX 27-JUN-2002; 2002US-00184085.
XX
XX 27-JUN-2001; 2001US-0301370P.
XX
XX (GARN/) GARNER H R.
XX (MINN/) MINNA J D.
XX (LUEB/) LUEBKE K J.
XX (BALO/) BALOG R P.
XX
XX Garner HR, Minna JD, Luebke KJ, Balog RP;
XX
XX WPI; 2003-874843/81.
XX
XX Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA.

XX Example 1; SEQ ID NO 236; 210pp; English.

XX This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of

CC probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene p16 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the invention.

XX SQ Sequence 21 BP; 3 A; 13 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 221 TGGATGAGAGTGGTGGTGGTG 241
|||||
Db 21 TGGATGAGAGCGGAGAGGTG 1

RESULT 670
ADJ97803
ID ADJ97803 standard; DNA; 21 BP.
XX
XX AC ADJ97803;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human Flk-1/KDR DNA sequence, a target for siRNA inhibition SeqID 576.
XX human; ss; short interfering RNA; siRNA; angiogenesis;
XX vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1;
XX Flk-1/KDR; kinase domain region; diabetic retinopathy;
XX age-related macular degeneration; inflammatory disease; psoriasis;
XX rheumatoid arthritis; cancer; breast; retinoblastoma; wilm's tumour;
XX lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;
XX antipsoriatic; antirheumatic; antiarthritic.
XX Homo sapiens.
XX OS
XX WO2004009769-A2.
XX
XX 29-JAN-2004.
XX
XX 18-JUL-2003; 2003WO-US022444.
XX
XX 24-JUL-2002; 2002US-0398417P.
XX
XX 14-NOV-2002; 2002US-00294228.
XX
XX (UYPE-) UNIV PENNSYLVANIA.
XX
XX Tolentino MJ, Reich SJ;
XX
XX WPI; 2004-203472/19.
XX
XX Novel short interfering RNA (siRNA) comprises sense and antisense RNA strands, useful for inhibiting expression of human vascular endothelial growth factor mRNA, for treating angiogenic disease, e.g. diabetic retinopathy and cancer.

XX Disclosure; SEQ ID NO 576; 218pp; English.

XX This invention relates to novel compositions that comprise short interfering RNA (siRNA) molecules, which can be used to inhibit angiogenesis. Specifically, it refers to siRNAs that target and cause RNAi-induced degradation of mRNA from human vascular endothelial growth factor (VEGF), the VEGF receptor (Flt-1) and the Flk-1/KDR (kinase domain region) genes, as well as mutants derived thereof. The present invention describes sense and antisense RNA strands that form an RNA duplex and bind to the target mRNA, such that expression is inhibited and the target degraded. As such, siRNA administered in combination with a therapeutic agent is useful for treating diseases associated with angiogenesis and the overexpression of VEGF, which include diabetic retinopathy, age-related macular degeneration, inflammatory disease, psoriasis and

CC rheumatoid arthritis. Furthermore, it can be used to treat various
CC cancers including breast, retinoblastoma, Wilm's tumour and lymphoma.
CC Accordingly, these compositions exhibit cytostatic, antidiabetic,
CC ophthalmological, antiinflammatory, antipsoriatic, antirheumatic and
CC antiarthritic activities. This oligonucleotide is a human FLK-1/KDR DNA
XX oligo, a target for siRNA inhibition of the invention.
SQ Sequence 21 BP; 11 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 972 ACACCGAGACCTCAAGCCCCA 992
| | | | | | | | | | | | | | | | | | | | |
Db 1 AAACCGAGACCTAAACCCCA 21

RESULT 671
ADO03877/c
ID ADO03877 standard; DNA; 21 BP.
XX
AC ADO03877;

DT 01-JUL-2004 (first entry)
XX Human ICAM-specific antisense oligonucleotide #3.
DE
XX Antisense activity; down-regulation; antisense; ICAM; human; ss.

OS Homo sapiens.
XX
PN US2004073376-A1.
XX
PD 15-APR-2004.

PF 14-JAN-2002; 2002US-00050888.

PR 19-JAN-2001; 2001US-0262993P.

XX (UTAH) UNIV UTAH RES FOUND.

PA Gesteland RF, Atkins JF, Matveeva OV, Giddings MC;
PI WPI; 2004-364070/34.
XX

XX Predicting antisense activity of an oligonucleotide for down-regulating
PT expression of an RNA, comprises developing an artificial neural network,
PT determining counts of mapped sequence motifs, and obtaining a output of
PT activity.

PS Disclosure; SEQ ID NO 13; 25pp; English.

XX The present invention relates to the method for making an artificial
CC neural network embodied on a computer-readable medium for predicting
CC antisense activity of oligonucleotides for down-regulating expression of
CC a selected RNA. The invention provides a five-fold reduction in the
CC number of oligonucleotides to be screened in vivo to find effective
CC targets. The present sequence is human ICAM-specific antisense
CC oligonucleotide. This sequence is used in the invention.

XX Sequence 21 BP; 3 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 225 TCAGAGTGGTGGTGGGGG 245
| | | | | | | | | | | | | | | | | | | | |
Db 21 TGAGAGGGAAGTGGGGG 1

RESULT 672

ADOQ30710/c
ID ADOQ30710 standard; DNA; 21 BP.

XX
AC ADOQ30710;

XX 23-SEP-2004 (first entry)

DT Device with substance to aid adhesion of biological material aptamer #4.
DE
XX aptamer; ss; implant; biological material adhesion; bioreactor.
XX Synthetic.

OS
XX WO2004055153-A2.

XX 01-JUL-2004.

XX 10-DEC-2003; 2003WO-EP013989.

XX 17-DEC-2002; 2002DE-01058924.

XX (UYTU-) UNIV TUEBINGEN EBERHARD-KARLS.
XX
PI Schluesener H, Wendel H;
XX WPI; 2004-517421/49.

XX Device coated with aptamers for binding specific biological materials,
PT useful e.g. as stent or component of extracorporeal circulation system,
PT also new aptamers specific for endothelial precursor cells.
XX
PS Claim 15; SEQ ID NO 4; 31pp; German.

XX The present invention relates to a device that has at least one surface
CC that contacts tissue and/or liquids of the human or animal body and is at
CC least partly coated with a substance that mediates binding of biological
CC materials. The new feature is that this substance is an aptamer. The
CC device is particularly an implant, e.g. a stent, vascular prosthesis,
CC heart valve, joint etc., but may also be a component of an extracorporeal
CC circulation system, a nanomaterial for tissue engineering and vascular
CC surgery, a catheter, contact lens, storage device for blood etc., also a
CC bioreactor for isolation and culture of selected cell types, for
CC production of substances or for growing organ replacements. The present
CC sequence is an aptamer suitable for use in the device of the invention.

XX Sequence 21 BP; 0 A; 7 C; 14 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 555 CCTCAGCGCGCCCTCCGTCG 575
| | | | | | | | | | | | | | | | | | | | |
Db 21 CCGCGCGCGCGCGCGCGCG 1

RESULT 673

ADOQ30708
ID ADOQ30708 standard; DNA; 21 BP.

XX
AC ADOQ30708;

XX 23-SEP-2004 (first entry)

XX Device with substance to aid adhesion of biological material aptamer #2.
DE aptamer; ss; implant; biological material adhesion; bioreactor.
XX Synthetic.

OS
XX WO2004055153-A2.

XX 01-JUL-2004.

XX 10-DEC-2003; 2003WO-EP013989.
 XX PF
 XX PR 17-DEC-2002; 2002DE-01058924.
 XX PA (UYTU-) UNIV TUEBINGEN EBERHARD-KARLS.
 XX PI Schluesener H, Wendel H;
 XX WPI; 2004-517421/49.
 XX DR
 XX PT Device coated with aptamers for binding specific biological materials,
 XX PT useful e.g. as stent or component of extracorporeal circulation system,
 XX PT also new aptamers specific for endothelial precursor cells.
 XX PS Claim 15; SEQ ID NO 2; 31pp; German.
 XX
 CC The present invention relates to a device that has at least one surface
 CC that contacts tissue and/or liquids of the human or animal body and is at
 CC least partly coated with a substance that mediates binding of biological
 CC materials. The new feature is that this substance is an aptamer. The
 CC device is particularly an implant, e.g. a stent, vascular prosthesis,
 CC heart valve, joint etc., but may also be a component of an extracorporeal
 CC circulation system, a nanomaterial for tissue engineering and vascular
 CC surgery, a catheter, contact lens, storage device for blood etc., also a
 CC bioreactor for isolation and culture of selected cell types, for
 CC production of substances or for growing organ replacements. The present
 CC sequence is an aptamer suitable for use in the device of the invention.
 XX
 XX SQ Sequence 21 BP; 0 A; 14 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.6; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 7.7e+02; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 555 CCTCAGCGCGCGCTCGTCG 575
 ||| ||||| ||||| |||||
 Db 1 CCGCGCGCGCGCGCGCGCGCG 21
 RESULT 674
 AAQ41809
 ID AAQ41809 standard; DNA; 22 BP.
 XX AC AAQ41809;
 XX DT 25-MAR-2003 (revised)
 XX DT 03-SEP-1993 (first entry)
 XX DE Baculovirus C2 complex binding site #6.
 XX KW Myc; c-myc; mammalian; E box; cancer; therapy; C1; C2; C2'; complex;
 XX KW homo-oligomer; hetero-oligomer; myogenin; Max; oncoprotein; primer;
 XX KW probe; electrophoretic mobility shift assay; EMSA; ss.
 XX OS Synthetic.
 XX FH Key Location/Qualifiers
 FT protein_bind 13..18
 FT /*tag= a
 FT /note= "C2 complex binding site"
 XX WO9308701-A1.
 XX
 XX PD 13-MAY-1993.
 XX PF 09-OCT-1992; 92WO-US008603.
 XX PR 30-OCT-1991; 91US-00785567.
 XX PA (GEHO) GEN HOSPITAL CORP.
 XX PI Kingston RE, Papoulas O;

XX WPI; 1993-167291/20.
 XX
 XX PT Prodn. of c-Myc protein from mammalian cells - and detection of c Myc
 XX PT inhibitors for use in cancer therapy.
 XX PS Disclosure; Fig 7a; 101pp; English.
 XX
 CC The sequences given in AAQ41767-825 represent sequences which are bound
 CC in an electrophoretic mobility shift assay (EMSA) by Myc. The isolated
 CC sequences contain the central E box core of CACGTG which binds very
 CC weakly with Myc homo-oligomers (C1 complex), but more tightly with Myc
 CC hetero-oligomers (C2 complex). The C2 complex requires a 26-29 kD factor
 CC in addition to Myc. The additional factor copurifies with Myc and
 CC resembles Max protein. A second copurifying 40-50 kD factor has been
 CC identified (forming C2' complex). Sites selected by the C2' complex
 CC contain the core CACGTG which bears remarkable homology to a myogenin
 CC binding site (see AAQ41763). Oligonucleotides containing the E box can be
 CC used in the purification of Myc from a mammalian source. See also
 CC AAQ41761-861. The isolated target sequences may be used in a method to
 CC inhibit c-Myc oncoprotein activity. (Updated on 25-MAR-2003 to correct PN
 CC field.)
 XX
 XX SQ Sequence 22 BP; 6 A; 9 C; 5 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.6; DB 1; Length 22;
 Best Local Similarity 81.0%; Pred. No. 8e+02; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1263 CCCAACTGAGGAGACGTGGCC 1283
 ||||| ||||| |||||
 Db 1 CCCAACTAGACCCACGTGGCC 21
 RESULT 675
 AAZ44872
 ID AAZ44872 standard; DNA; 22 BP.
 XX AC AAZ44872;
 XX DT 27-APR-2000 (first entry)
 XX DE Human apolipoprotein E PCR primer P1.
 XX KW Detection; primer extension; point mutation; pathogenicity; therapy;
 XX KW cancer; genetic disease; polymorphism; apolipoprotein E; ApoE; human;
 XX KW PCR primer; ss.
 XX OS Homo sapiens.
 XX PN US6013431-A.
 XX PD 11-JAN-2000.
 XX PF 02-DEC-1993; 93US-00162376.
 XX PR 16-FEB-1990; 90US-00482005.
 XX PR 15-FEB-1991; 91US-00656575.
 XX PA (MOLE-) MOLECULAR TOOL INC.
 XX PI Syvanen A, Soederlund HE;
 XX WPI; 2000-146544/13.
 XX
 XX PT Identifying the nucleotide at specific position in a target sequence for
 XX PT detecting disease-related point mutations involves extending a primer
 XX PT that binds adjacent to the specific site to incorporate a labeled
 XX PT deoxynucleotide.
 XX
 XX PS Example 1; Col 9-10; 14pp; English.
 XX CC This invention describes a novel method for determining the identity of a

CC specific nucleotide at one or more defined sites in a target nucleic acid
CC polymer involves formation of a detectable primer extension product if
CC the specific nucleotide is present at the defined site in the target
CC nucleic acid. The method is specifically used to detect point mutations
CC which are associated with altered pathogenicity or resistance to therapy
CC in a microorganism, particularly human immune deficiency virus or with
CC cancer or a genetic disease (or susceptibility to it) in humans, but more
CC generally can be used to detect mutations in RNA or DNA from animals,
CC plants or microorganisms. By selecting a primer that binds adjacent to
CC the specific site, variations at this site can be detected following
CC incorporation of only a single dNTP. The method requires only a few,
CC simple manipulations, making it suitable for routine use, and allows
CC quantification of the proportion of mutated cells in a mixed population,
CC down to 0.5% of this population. The method is easily automated. This
CC sequence represents a PCR primer used to detect a polymorphism in human
CC apolipoprotein E (apoE)

SQ Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02; 4; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1301 AGGAGTTCAGACATACAACT 1321
||||| ||| |||||
Db 2 AGGAGTTCAGAGGCTCACAAT 22

RESULT 676
AAC72227/c
ID AAC72227 standard; DNA; 22 BP.
XX
AC AAC72227;
XX
DT 09-FEB-2001 (first entry)
XX
DE Single nucleotide polymorphism PCR primer #1371.
XX
KW Single nucleotide polymorphism; SNP; human; genetic disease;
KW disease susceptibility; cardiovascular system; endocrine system;
KW neurological system; forensic testing; paternity testing; PCR primer; ss.
XX Homo sapiens.
OS
PN WO200058519-A2.
XX
PD 05-OCT-2000.
XX
PF 30-MAR-2000; 2000WO-US008440.
XX
PR 31-MAR-1999; 99US-0127248P.
XX

PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
PA (AFFY-) AFFYMETRIX INC.
XX
PI Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI Lipshutz RJ, Patil N, Sklar P;
XX
DR WPI; 2000-611722/58.
XX

XX Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX
PS Claim 8; Fig 5; 214pp; English.

XX The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,

CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases

SQ Sequence 22 BP; 9 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02; 4; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1497 CACTACTTCGCATATTGCACT 1517
||||| ||| |||||
Db 21 CATTAATTACGTATTGCACT 1

RESULT 677
AAC80114/c
ID AAC80114 standard; DNA; 22 BP.
XX

AC AAC80114;
XX
DT 03-MAY-2001 (first entry)
XX

DE Reverse primer #26 used for amplification of HLA-A exon 2.
XX
KW HLA-A; HLA-B; HLA-C; typing; primer; human; ss.
XX

OS Homo sapiens.
OS Synthetic.

XX WO200061795-A2.
XX
PD 19-OCT-2000.
XX

PF 05-APR-2000; 2000WO-EP002998.
XX
PR 09-APR-1999; 99EP-00870068.
PR 11-JUN-1999; 99US-0138614P.
XX

PA (INNO-) INNOGENETICS NV.

XX De Canck I, Rombout A, Rossau R;
XX
DR WPI; 2000-647426/62.
XX

XX Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4
PT of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles using defined
PT primer sets, useful for subtyping or typing of HLA Class I alleles.

XX Claim 4; Page 35; 128pp; English.

XX The present invention relates to a method for the locus-specific,
CC separate amplification of exon 2, exon 3, and/or exon 4 of human
CC leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles. The method is useful
CC for subtyping or typing of HLA class I alleles. The present sequence is
CC an amplification primer used in the method

XX SQ Sequence 22 BP; 1 A; 10 C; 7 G; 3 T; 0 U; 1 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 88.2%; Pred. No. 8e+02; 1; Indels 0; Gaps 0;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 249 TGACCCCTGGAGAGGCC 265
||||| ||| |||||
Db 22 TGHCCCGGAGAGGCC 6

RESULT 678
AAS23687/c
ID AAS23687 standard; DNA; 22 BP.
XX
AC AAS23687;

XX 04-DEC-2001 (first entry)
 XX Primer A #1 used as probe for identifying C. albicans GRACE strain.
 DE Gene identification; essential gene; GRACE; pathogenic fungus;
 XX gene replacement and conditional expression; fungal infection; probe; ss.
 KW Candida albicans.
 OS Synthetic.
 XX WO200160975-A2.
 XX 23-AUG-2001.
 XX 20-FEB-2001; 2001WO-US005551.
 XX 19-FEB-2000; 2000US-0183534P.
 XX (ELIT-) ELITRA PHARM INC.
 XX Roemer T, Jiang B, Boone C, Bussey H;
 XX WPI; 2001-489080/53.
 XX Identifying genes essential to fungal metabolisms and identifying
 PT potential therapeutic agents that target these genes.
 XX Disclosure; Page 301; 324pp; English.
 XX The present invention relates to novel methods for constructing fungal
 CC strains useful for identification and validation of gene products as
 CC targets for therapeutic agents, for creating a collection of identified
 CC essential genes, and screening assays for the discovery of new drugs. The
 CC invention provides the GRACE (gene replacement and conditional
 CC expression) method for the construction of mutant organisms referred to
 CC as GRACE strains of the organism. The invention can be applied to any
 CC organism, particularly a pathogenic fungus e.g. Candida albicans,
 CC Aspergillus fumigatus and Cryptococcus neoformans. The methods are useful
 CC to identify agents that may be used in the treatment of fungal
 CC infections. AAS23687-AAS23747 represent primers A #1-61 used as probes
 CC for identifying C. albicans GRACE strains
 XX Sequence 22 BP; 3 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
 SQ
 Query Match 0.88; Score 14.6; DB 1; Length 22;
 Best Local Similarity 81.0%; Pred. No. 8e+02;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 130 CGGATGAAGAAGATCAACCG 150
 Db 22 CGATCAAGATGATCAACAG 2
 RESULT 679
 ABS61060
 ID ABS61060 standard; DNA; 22 BP.
 AC ABS61060;
 XX 05-NOV-2002 (first entry)
 XX Human automated genomic bit analysis (GBA) PCR primer #37.
 DE Human, ss; aminopeptidase P; XPNP2; bradykinin receptor B1; primer;
 KW BDKR1; tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH;
 KW kallikrein 1; KLK1; bradykinin receptor B2; BDKR2; gene therapy;
 KW angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;
 KW polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
 KW cardiovascular disease; angina pectoris; hypertension; heart failure;
 KW myocardial infarction; ventricular hypertrophy; vascular disease;
 KW aneurysm; embolism; thrombosis; coronary artery disease; angioedema;
 KW arteriosclerosis; atherosclerosis; hypersensitivity; sepsis; PCR;

KW autoimmune disease; inflammatory arthritis; cancer; wound; genotyping;
 KW viral infection; bacterial infection; fungal infection; COPD; GBA;
 KW Chronic obstructive pulmonary disease; enterocolitis;
 KW automated genetic bit analysis.
 XX Homo sapiens.
 XX WO200261131-A2.
 XX 08-AUG-2002.
 XX 03-DEC-2001; 2001WO-US047235.
 XX 04-DEC-2000; 2000US-0251015P.
 PR 23-JAN-2001; 2001US-0263678P.
 PR 02-MAR-2001; 2001US-0273037P.
 XX (BRIM) BRISTOL-MYERS SQUIBB CO.
 PA (TSUC/) TSUCHIHASHI Z.
 PA (HUIL/) HUI L.
 XX Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;
 PI Swanson BN, Powell JR;
 PI WPI; 2002-619265/66.
 DR New isolated nucleic acid with at least one polymorphic position, useful
 XX for detecting, diagnosing and treating disorders such as angioedema,
 PT cancer, viral, bacterial or fungal infection, cardiovascular and
 PT autoimmune diseases.
 XX Example 3; Page 926; 977pp; English.
 PS The invention relates to an isolated nucleic acid from a human gene
 XX encoding aminopeptidase P (XPNP2), bradykinin receptor B1 (BDKR1),
 CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
 CC 1 (KLK1), bradykinin receptor B2 (BDKR2), angiotensin converting enzyme
 CC 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
 CC polymorphic position. Also included are (1) a probe that hybridises to a
 CC polymorphic position as provided in the detailed summary of single
 CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
 CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising
 CC obtaining the sample from one or more individuals and determining the
 CC nucleic acid sequence at one or more polymorphic positions in a gene
 CC encoding a protein selected from the group above; (3) constructing (M2)
 CC haplotypes using the genes comprising grouping at least two nucleic acids
 CC upon administration of an ACE inhibitor and/or vasopeptidase inhibitor
 CC using the polymorphic data; (5) a library of nucleic acids, each of which
 CC comprises one or more polymorphic positions within a gene encoding a
 CC human protein selected from the group above; and (6) genotyping (M4) an
 CC individual comprising obtaining a nucleic acid sample, determining the
 CC nucleotide present in at least one polymorphic position, and comparing at
 CC least one position with a known data set. The genes, (M1, M2, M3 and M4)
 CC and compositions are useful for detecting, diagnosing, treating,
 CC preventing various disorders such as angioedema and diseases which
 CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
 CC disease, trachomas, and cardiovascular diseases like angina pectoris,
 CC hypertension, heart failure, myocardial infarction, ventricular
 CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
 CC artery disease, arteriosclerosis and/or atherosclerosis, and
 CC hypersensitivity reactions, sepsis, bacterial or fungal infection, Chronic
 CC arthritis, cancer, wounds, viral, autoimmune diseases, inflammatory
 CC obstructive pulmonary disease (COPD) and enterocolitis (many other
 CC diseases and disorders are listed in the specification). The
 CC polynucleotides are also useful for chromosome identification. Antibodies
 CC against the proteins may be utilised for immunophenotyping of cell lines
 CC and biological samples. The present sequence is a genotyping PCR primer
 CC for the gene encoding one of the proteins listed above, using the method
 CC of automated genetic bit analysis, GBA
 XX Sequence 22 BP; 3 A; 6 C; 9 G; 4 T; 0 U; 0 Other;

```
Query Match      0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1594 GTGGTGGACACGAGTCTTAA 1614
      ||||| ||| ||||| |||
Db 1 GTGGTGGGACGAGGAGTCTCTCA 21

RESULT 680
ABZ29860/c
ID ABZ29860 standard; DNA; 22 BP.
XX
AC ABZ29860;
XX
DT 30-JAN-2003 (first entry)
XX
DE
XX
KW Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis;
KW signal transduction; DNA replication; cell division; growth;
KW proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
XX
OS Candida albicans.
XX
PN WO200253728-A2.
XX
PD 11-JUL-2002.
XX
PF 26-DEC-2001; 2001WO-US049486.
XX
PR 29-DEC-2000; 2000US-0259128P.
PR 20-FEB-2001; 2001US-00792024.
PR 22-AUG-2001; 2001US-0314050P.
XX
PA (ELIT-) ELITRA PHARM INC.
XX
PI Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KU;
XX
DR WPI; 2002-566694/60.
XX
XX
PT Constructing strains for identifying gene products as effective targets
PT for therapeutic intervention, by inactivating in the strain one allele of
PT a gene and placing other allele of the gene under conditional expression.
XX
PS Claim 36; SEQ ID NO 4011; 167pp + Sequence Listing; English.
XX
CC The invention relates to constructing (M1) a strain of diploid fungal
CC cells in which both alleles of a gene are modified, comprising modifying
CC one allele by insertion or replacement by a cassette having an
CC expressible selectable marker and modifying other allele by
CC recombination, of a promoter replacement fragment with a heterologous
CC promoter, so that expression of the second allele is regulated by the
CC promoter. (M1) is useful for constructing a strain of diploid fungal
CC cells in which both alleles of a gene are modified. The diploid fungal
CC cells having both alleles modified are useful for identifying a gene that
CC is essential to the survival or growth of a fungus, a gene that
CC contributes to the virulence and/or pathogenicity of a fungus, a gene
CC that contributes to the resistance of a diploid fungus to an antifungal
CC agent, an antifungal agent that inhibits the growth of a diploid fungus
CC and for identifying a therapeutic agent for treatment of a mammalian
CC disease. (M1) is useful for identifying a compound which modulates the
CC activity of a gene product, preferably enzymatic activity, carbon
CC compound catabolism, biosynthetic, transporter, transcriptional,
CC translational, signal transduction, DNA replication and cell division
CC activity. The method is useful for identifying a compound having the
CC ability to inhibit growth or proliferation of C. albicans cells and for
CC treating infection by C. albicans. The present sequence is that of a PCR
CC primer used in the method of the invention. Note: The sequence data for
CC this patent is not represented in the printed specification but is based
CC on sequence information supplied to Derwent by the European Patent Office
XX
XX
Sequence 22 BP; 3 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
```

```
Query Match      0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAAAACGG 150
      ||| ||| ||| ||| ||| |||
Db 22 CGAATCAAGATGATCAAAACAG 2

RESULT 681
ABN88966
ID ABN88966 standard; DNA; 22 BP.
XX
AC ABN88966;
XX
DT 22-AUG-2002 (first entry)
XX
DE Human NOV1 forward PCR primer SEQ ID NO:14.
XX
KW Human; NOV1; NOVX; endozepine-related protein precursor-like protein;
KW cystostatic; antiarteriosclerotic; antidiabetic; anti-HIV; antiasthmatic;
KW anti-inflammatory; haemostatic; hypotensive; neuroprotective; anorectic;
KW nootropic; antidepressant; immunosuppressive; analgesic; cardiant;
KW gastrointestinal; anticonvulsant; immunomodulator; tranquilliser;
KW antialcoholic; antilipaemic; gene therapy; cancer; Alzheimer's disease;
KW stroke; tuberculous sclerosis; Parkinson's disease; hypercalcaemia;
KW Huntington's disease; cerebral palsy; epilepsy; Lesch-Nyhan syndrome;
KW multiple sclerosis; ataxia-telangiectasia; leukodystrophy; addiction;
KW anxiety; depression; neurodegenerative disorder; stress; immune disorder;
KW alcoholism; obesity; diabetes; haematopoietic disorder; dyslipidaemia;
KW wasting disorder; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200234782-A2.
XX
PD 02-MAY-2002.
XX
PF 23-OCT-2001; 2001WO-US046005.
XX
PR 23-OCT-2000; 2000US-0242485P.
PR 22-JAN-2001; 2001US-0263339P.
PR 29-JAN-2001; 2001US-0264850P.
PR 22-OCT-2001; 2001US-00035568.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Gerlach V, Macdougall JR, Millet I, Gunther E, Ellerman K;
PI Grosse WM, Alsebrook JP, Lepley DM, Burgess CE, Vernat CAM;
PI Shenoy S, Spytek KA, Mishra V, Padigaru M;
XX
DR WPI; 2002-479708/51.
XX
PT New NOVX or NOV1 polypeptides and nucleic acids, useful for preventing or
PT treating NOVX-associated disorders e.g. cardiomyopathy, atherosclerosis,
PT cancer, Huntington's disease or Alzheimer's disease.
XX
PS Example 2; Page 96; 124pp; English.
XX
CC The present invention describes human NOV1 (an endozepine-related protein
CC precursor-like protein). Human NOV1 maps to human chromosome 10. NOV1 has
CC cystostatic, antiarteriosclerotic, antidiabetic, haemostatic, anti-HIV,
CC antiasthmatic, anti-inflammatory, hypotensive, neuroprotective,
CC anorectic, nootropic, antidepressant, immunosuppressive, tranquilliser,
CC analgesic, cardiant, gastrointestinal, anticonvulsant, immunomodulator,
CC antialcoholic and antilipaemic activities, and can be used in gene
CC therapy. NOVX nucleic acids, polypeptides and antibodies are useful for
CC treating or diagnosing diseases such as cancers, Von Hippel-Lindau
CC syndrome, Alzheimer's disease, stroke, tuberculous sclerosis, Parkinson's
CC disease, hypercalcaemia, Huntington's disease, cerebral palsy, epilepsy,
CC Lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangiectasia, pain,
CC leukodystrophies, behavioural disorders, addiction, anxiety, depression,
```

The present sequence is an antisense primer for cytochrome P450 CYP27A1. RT-PCR was used to characterise metabolic enzyme induction by vitamin D analogues, corticosteroids and macrolactams in human skin. The invention provides for the use of antagonists of P450 enzymes for the prevention or alleviation of a tachyphylactic response to administration of a vitamin D analogue, corticosteroid or macrolactam to a patient, e.g. for the treatment of psoriasis. The underlying cause of tachyphylaxis was shown to be degradation of a drug in the patient, rather than desensitization or receptor down-regulation. Exposure of a patient to the drug for extended periods results in an increase in the expression of enzymes which are capable of metabolizing the drug. A method for treatment of tachyphylaxis therefore involves inhibiting the induced metabolic enzyme, especially a P450 cytochrome, by administration of an antagonist of the enzyme. Detection of an increase in the amount and/or activity of a metabolic enzyme capable of metabolizing a drug following extended exposure of a cell from an individual to the drug indicates the increased likelihood of that individual developing a tachyphylactic response to the

KW drug production; food production; enzyme.
OS Bacillus sp.
XX JP2002078489-A.
XX 19-MAR-2002.
XX PF 04-SEP-2000; 2000JP-00267840.
XX PR 04-SEP-2000; 2000JP-00267840.
XX FA (DAIW) DAIWA KASEI KK.
XX WPI; 2002-430301/46.
XX A new acid protease in which the serine residue participates to activity
PT expression.
XX Example 4; Page 8; 25pp; Japanese.
XX The invention comprises the amino acid and coding sequences of two novel
CC Bacillus sp acid proteases. The novel acid proteases of the invention are
CC useful as digestive enzymes for the hydrolysis of proteins in drugs and
CC foods. The present DNA sequence represents a PCR primer that is specific
CC for the gene sequence of a Bacillus sp acid protease
XX
SQ Sequence 22 BP; 1 A; 9 C; 8 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. NO. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1466 GTCGTGGGGGAGCGGATCCACA 1486
DB 22 GCCGGGGCCAGCGGATCCACA 2

RESULT 685
AAL43783
ID AAL43783 standard; DNA; 22 BP.
XX
AC AAL43783;
XX
DT 26-SEP-2002 (first entry)
XX
DE Human NOV2 gene PCR primer: SEQ ID NO 39.
XX Human; PCR; primer; ss; gene therapy; vaccine; NOV2; NOVOX; cancer;
KW neurodegenerative disorder; immune disorder; haematopoietic disorder;
KW dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain;
KW Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy;
KW tuberos scleriosis; hypercalcaemia; Parkinson's disease; epilepsy;
KW Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;
KW depression; stress; diabetes.
XX Homo sapiens.
OS
XX WO200244211-A2.
XX
PD 06-JUN-2002.
XX
PF 29-NOV-2001; 2001WO-US048842.
XX
PR 29-NOV-2000; 2000US-0253834P.
PR 25-JAN-2001; 2001US-0264180P.
PR 20-AUG-2001; 2001US-0313656P.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Edinger SR, Macdougall JR, Millet I, Ellerman K, Stone DJ;
PI Gerlach VL, Grosse WM, Alsobrook JP, Lepley DM, Reiger DK;
PI Burgess CE, Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;

PI Mishra V, Patturajan M, Shenoy SK, Rastelli L, Tchernev VT;
PI Vernet CAM, Zerhusen BD, Malyankar UM, Guo X, Miller CE;
XX Gangolli EA;
DR WPI; 2002-527702/56.
XX
XX Novel cytoplasmic, nuclear, membrane bound and secreted NOVX
PT polypeptides, useful for treating cancers, neurodegenerative disorders,
PT immune disorders, hematopoietic disorders, diabetes and metabolic
PT disorders.
XX
XX Example 3; Page 130; 155pp; English.
XX The invention comprises the amino acid and coding sequences of human
CC NOVX (NOV1 and NOV2) proteins. The NOVX proteins of the invention are
CC useful for identifying an agent (a cellular receptor or downstream
CC effector) that binds to a NOVX protein. The NOVX DNA and protein
CC sequences of the invention are useful for the treatment (gene therapy) or
CC prevention (vaccine) of: cancer; neurodegenerative disorders; immune
CC disorders; haematopoietic disorders; dyslipidaemia; obesity; metabolic
CC syndrome X; wasting disorders; Von Hippel-Lindau (VHL) syndrome;
CC Alzheimer's disease; stroke; tuberos scleriosis; hypercalcaemia;
CC Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy;
CC Lesch-Nyhan syndrome; ataxia-telangiectasia; pain; depression; stress and
CC diabetes. The present DNA sequence represents a NOV2 gene PCR primer
XX
SQ Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. NO. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 886 GGGACATCATCATCATGCAC 906
DB 2 GCGAAATCATCATCATCAAC 22
RESULT 686
AAL43762
ID AAL43762 standard; DNA; 22 BP.
XX
AC AAL43762;
XX
DT 26-SEP-2002 (first entry)
XX
DE Human NOV1 gene PCR primer: SEQ ID NO 18.
XX Human; PCR; primer; ss; gene therapy; vaccine; NOV1; NOVOX; cancer;
KW neurodegenerative disorder; immune disorder; haematopoietic disorder;
KW dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain;
KW Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy;
KW tuberos scleriosis; hypercalcaemia; Parkinson's disease; epilepsy;
KW Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;
KW depression; stress; diabetes.
XX Homo sapiens.
OS
XX WO200244211-A2.
XX
PD 06-JUN-2002.
XX
PF 29-NOV-2001; 2001WO-US048842.
XX
PR 29-NOV-2000; 2000US-0253834P.
PR 25-JAN-2001; 2001US-0264180P.
PR 20-AUG-2001; 2001US-0313656P.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Edinger SR, Macdougall JR, Millet I, Ellerman K, Stone DJ;
PI Gerlach VL, Grosse WM, Alsobrook JP, Lepley DM, Reiger DK;
PI Burgess CE, Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;
PI Mishra V, Patturajan M, Shenoy SK, Rastelli L, Tchernev VT;


```

XX DR WPI; 2002-527702/56.
XX
XX Novel cytoplasmic, nuclear, membrane bound and secreted NOVX
PT polypeptides, useful for treating cancers, neurodegenerative disorders,
PT immune disorders, hematopoietic disorders, diabetes and metabolic
PT disorders.
XX
XX Example 3; Page 130; 155pp; English.
XX
XX The invention comprises the amino acid and coding sequences of human
CC NOVX (NOV1 and NOV2) proteins. The NOVX proteins of the invention are
CC useful for identifying an agent (a cellular receptor or downstream
CC effector) that binds to a NOVX protein. The NOVX DNA and protein
CC sequences of the invention are useful for the treatment (gene therapy) or
CC prevention (vaccine) of: cancer; neurodegenerative disorders; immune
CC disorders; haematopoietic disorders; dyslipidaemia; obesity; metabolic
CC syndrome X; wasting disorders; Von Hippel-Lindau (VHL) syndrome;
CC Alzheimer's disease; stroke; tuberculous sclerosis; hypercalcaemia;
CC Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy;
CC Lesh-Nyhan syndrome; ataxia-telangiectasia; pain; depression; stress and
CC diabetes. The present DNA sequence represents a NOV2 gene PCR primer
XX
XX Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
SQ

```

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```

QY 886 GGGACATCATCAACATGCAC 906
DB 2 GGCATAATCATCAATCAAC 22

```

RESULT 689
ACD13238/c

```

XX ID ACD13238 standard; DNA; 22 BP.
XX
XX ACD13238;
XX
XX 13-AUG-2003 (first entry)
XX
XX NOVX human protein associated PCR primer #6.
XX
XX NOVX; autoimmune disease; allergy; Alzheimer's disease; stroke;
XX Parkinson's disease; Huntington's disease; multiple sclerosis; addiction;
XX anxiety; pain; diabetes; glomerulonephritis; obesity;
XX systemic lupus erythematosus; asthma; scleroderma; pancreatitis;
XX graft versus host disease; ulcer; anaemia; cancer; trauma; infection;
XX cardiomyopathy; atherosclerosis; hypertension; AIDS; Crohn's disease;
XX acquired immunodeficiency syndrome; chromosomal mapping; tissue typing;
XX forensic biology; predictive medicine; gene therapy; human; PCR; primer;
XX ss.
XX
XX Homo sapiens.
XX
XX WO200298900-A2.
XX
XX 12-DEC-2002.
XX
XX 04-JUN-2002; 2002WO-US017558.
XX
XX 04-JUN-2001; 2001US-0295607P.
XX
XX 04-JUN-2001; 2001US-029561P.
XX
XX 06-JUN-2001; 2001US-0296404P.
XX
XX 06-JUN-2001; 2001US-0296418P.
XX
XX 07-JUN-2001; 2001US-0296575P.
XX
XX 11-JUN-2001; 2001US-0297414P.
XX
XX 12-JUN-2001; 2001US-0297567P.
XX
XX 15-JUN-2001; 2001US-0298528P.
XX
XX 18-JUN-2001; 2001US-0299133P.
XX
XX 19-JUN-2001; 2001US-0299230P.
XX
XX 21-JUN-2001; 2001US-0299949P.

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PR 22-JUN-2001; 2001US-0300177P.
PR 26-JUN-2001; 2001US-0300883P.
PR 28-JUN-2001; 2001US-0301530P.
PR 28-JUN-2001; 2001US-0301530P.
PR 03-JUL-2001; 2001US-0301530P.
PR 12-SEP-2001; 2001US-0302951P.
PR 27-SEP-2001; 2001US-0318727P.
PR 22-FEB-2002; 2002US-0325685P.
PR 03-JUN-2002; 2002US-0358814P.
XX 03-JUN-2002; 2002US-00161927.
XX
XX (CURA-) CURAGEN CORP.
PA
XX Zernhusen BD, Kekuda R, Spytek KA, Shenoy SG, Miller CE, Hjalt T;
XX Gerlach VL, Baumgartner JC, Guo X, Gangolli EA, Vernet CAM;
XX Padigaru M, Li L, Pena CEA, Gorman L, Anderson DW, Edinger SR;
XX Patturajan M, Stone DJ;
XX WPI; 2003-140585/13.
XX
XX Novel isolated NOVX polypeptide useful treating or preventing disorders
XX or syndromes such as autoimmune disease, allergies, Alzheimer's disease,
XX stroke, Parkinson's disease, Huntington's disease or multiple sclerosis.
XX
XX Example 39; Page 241; 408pp; English.
XX
XX The invention describes an isolated NOVX polypeptide (I) comprising a
XX sequence selected from a sequence (SI) of 1121, 635, 299, 1720, 176, 583,
XX 214, 395, 1098, 134, 427, 1333, 407, 806, 804, 1253, 382, 1045, 284, 496,
XX 506, 759, 390, 133, 215, 240, 1069, 116, 439, 1138, 477, 316, 269, 219,
XX 305, 406, 460, 365, 380, 829 or 326 amino acids fully defined in the
XX specification, and the mature form of SI. (I) is useful for treating or
XX preventing a pathology associated with (I) in a subject, preferably a
XX human, or for identifying an agent that binds to (I), where the agent is
XX a cellular receptor or a downstream effector. (I), a polynucleotide (II)
XX encoding (I) or an anti-(I)-antibody (V) is useful treating or preventing
XX disorders or syndromes such as autoimmune disease, allergies, Alzheimer's
XX disease, stroke, Parkinson's disease, Huntington's disease, multiple
XX sclerosis, addiction, anxiety, pain, diabetes, glomerulonephritis,
XX systemic lupus erythematosus, asthma, scleroderma, graft versus host
XX disease, pancreatitis, obesity, ulcers, anaemia, cancer, trauma, viral,
XX bacterial or parasitic infections, cardiomyopathy, atherosclerosis,
XX hypertension, acquired immunodeficiency syndrome (AIDS) or Crohn's
XX disease. (I), (II) or (V) is useful in screening assays, detection assays
XX (e.g., chromosomal mapping, tissue typing, forensic biology), predictive
XX medicine (e.g., diagnostic assays, prognostic assays, monitoring clinical
XX trials and pharmacogenomic), and in methods of treatment (e.g.,
XX therapeutic and prophylactic). (II) is useful in gene therapy, to express
XX (I), to detect NOVX mRNA or a genetic lesion in a NOVX gene, and to
XX modulate NOVX activity. This sequence represents a primer used to isolate
XX DNA encoding a novel human NOV protein
XX
XX Sequence 22 BP; 5 A; 6 C; 4 G; 7 T; 0 U; 0 Other;
SQ

```

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```

QY 155 TGTCAATGACACTCGAGGTG 175
DB 22 TGTCTATGACACTCGAAGGAG 2

```

RESULT 690
ABX72300

```

XX ID ABX72300 standard; DNA; 22 BP.
XX
XX ABX72300;
XX
XX 03-JUN-2003 (first entry)
XX
XX Human NOVX DNA PCR primer #17.
XX
XX Human; NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;
XX

```

KW	hypertension; congenital heart defect; aortic stenosis; valve disease;
KW	atrial septal defect; atrioventricular canal defect; ductus arteriosus;
KW	pulmonary stenosis; subaortic stenosis; ventricular septal defect; VSD;
KW	tuberos sclerosais; scleroderma; atherosclerosis; infectious disease;
KW	obesity; anorexia; neurodegenerative disorder; Alzheimer's disease;
KW	Parkinson's disease; immune disorder; haematopoietic disorder; primer;
KW	haemophilia; hypercoagulation; Crohn's disease; cancer.
XX	
OS	Homo sapiens.
XX	
PN	WO200281498-A2.
PD	
XX	17-OCT-2002.
PF	
XX	03-APR-2002; 2002WO-US010780.
XX	
03-APR-2001;	2001US-0281086P.
03-APR-2001;	2001US-0281136P.
05-APR-2001;	2001US-0281863P.
05-APR-2001;	2001US-0281906P.
06-APR-2001;	2001US-0282020P.
10-APR-2001;	2001US-0282930P.
10-APR-2001;	2001US-0282934P.
12-APR-2001;	2001US-0283512P.
13-APR-2001;	2001US-0283710P.
17-APR-2001;	2001US-0284234P.
19-APR-2001;	2001US-0285325P.
20-APR-2001;	2001US-0285381P.
20-APR-2001;	2001US-0285609P.
23-APR-2001;	2001US-0285748P.
23-APR-2001;	2001US-0285890P.
24-APR-2001;	2001US-0286068P.
25-APR-2001;	2001US-0286292P.
27-APR-2001;	2001US-0287213P.
02-MAY-2001;	2001US-0288257P.
29-MAY-2001;	2001US-0294164P.
30-MAY-2001;	2001US-0294484P.
18-JUN-2001;	2001US-0298952P.
19-JUN-2001;	2001US-0299237P.
19-JUN-2001;	2001US-0299276P.
12-SEP-2001;	2001US-0318750P.
25-SEP-2001;	2001US-0324800P.
25-SEP-2001;	2001US-0324802P.
27-SEP-2001;	2001US-0325684P.
17-OCT-2001;	2001US-0330143P.
14-NOV-2001;	2001US-0332131P.
14-NOV-2001;	2001US-0332240P.
14-NOV-2001;	2001US-0332779P.
21-NOV-2001;	2001US-0332115P.
04-DEC-2001;	2001US-0337621P.
03-JAN-2002;	2002US-0345783P.
16-JAN-2002;	2002US-0350251P.
02-APR-2002;	2002US-00114270.
XX	
{CURA-}	CURAGEN CORP.
XX	
Guo X,	Kekuda R, Miller CE, Malyankar UM, Spytek KA;
Patturajan M,	Liu X, Gusev VV, Li L, Vernet CAM, Zerhusen BD;
Gorman L,	Shenoy SG, Pena CEA, Smithson G, Burgess CE, Gerlach V;
Padigaru M,	Shimkets RA, Gangolli EA, Taupier RJ, Casman SJ, Ji W;
Anderson DW,	Leite MW, Rastelli L, Edinger SR, Stone DJ;
Macdougall JR,	Rotherberg ME, Mazur A, Millet I, Peyman JA;
Ellerman K;	
XX	
WPI;	2003-046858/04.
XX	
DR	
XX	
PT	New isolated NOVX polypeptide useful for treating atherosclerosis,
PT	metabolic disorders, diabetes, obesity, infectious disease, anorexia,
PT	neurodegenerative disorders, Alzheimer's disease and cancer.
XX	
PS	Example 83; Page 368; 666pp; English.
XX	
CC	The invention relates to human polypeptides, termed NOVX, and the

CC polynucleotides encoding them. The polypeptides and polynucleotides are
CC useful for diagnosing disease, and screening for potential therapeutic
CC agents. The sequences are useful for treating metabolic disorders,
CC cardiomyopathy, diabetes, hypertension, congenital heart defects, aortic
CC stenosis, atrial septal defect (ASD), atrioventricular canal defect,
CC ductus arteriosus, pulmonary stenosis, subaortic stenosis, ventricular
CC septal defect (VSD), valve diseases, tubercous sclerosis, scleroderma,
CC atherosclerosis, obesity, infectious diseases, anorexia, neurodegenerative
CC disorders, Alzheimer's disease, Parkinson's disease, immune disorders,
CC haematopoietic disorders, haemophilia, hypercoagulation, Crohn's disease
CC and cancer. This sequence represents a PCR primer used to amplify a human
CC NOVX polynucleotide of the invention

Sequence 22 BP: 9 A; 4 C; 5 G; 4 T; 0 U; 0 Other; 0 X

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17: Conservative 0; Mismatches 4; Indels

QY
600 TGGGAAACTGGAGACCTACAT 620

Dβ
2 TAGGAAAATGGACGCCTACAT 22

RESULT 691

ARC8005

ACC80005
ID ACC80005 standard: DNA: 22 BP.

AA ACC80005:

XX 25-VIII-2003 (first entry)

XX
DE Human HDAC9 exon 4 alternative 5' splice donor consensus sequence.

XX	Human; HDAC9; histone deacetylase 9; enzyme; cytostatic; cancer;
KW	leukaemia; ds.
KW	

XX
OS
Homo sapiens.

XX
PN
WO2003029451-A2XX
PD
10-APR-2003

03-OCT-2002. 2002WQ-GB004455

03-OCT-2001 2001GB-00023664

XX (CANC-) CANCER RES INST.
PA (ZELE/) ZELENT A.
PA (PETR/) PETRIE K.
PA (GUID/) GUIDEZ F.

XX
PI
Zelent A.
Petrie K.
Guidez F.

WPI: 2003-381634/36.

AA New histone deacetylase 9 polypeptide, useful for screening for candidate
PT compounds that share a, bind to, or inhibits the histone deacetylase 9
PT biological activity, and for diagnosing or prognosing cancer, e.g.
PT leukemia.

XX
PS Disclosure: Page 44: 71pp: English:

The invention relates to an isolated polypeptide having histone deacetylase (HDAC) activity. Polypeptides and nucleic acids of the invention are useful for screening for candidate compounds that share, bind to, or inhibit histone deacetylase 9 (HDAC9) biological activity, and for diagnosing or prognosing cancer, e.g. leukaemia such as TEL-AML1 positive and negative pre-B cell acute lymphoblastic leukemia or B cell lymphoma. The current sequence the human HDAC9 exon 4 alternative 5' splice donor consensus sequence

Sequence 22 BP: 8 A; 4 C; 8 G; 2 T; 0 U; 0 Other;

XX CC The invention relates to human polypeptides, termed NOVX, and the

```
Query Match          0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 GGAAGCAGCGTAAAGGATGGA 22
   ||| ||| ||| ||| ||| |||
DB 2 GGCACACGGTAAACGATGGA 22

RESULT 692
ADA00216/c
ID ADA00216 standard; RNA; 22 BP.
AC
XX
AC ADA00216;
XX
XX
DT 06-NOV-2003 (first entry)
XX
DE Mouse and human miRNA sequence miR-C30 SEQ ID NO:213.
XX
KW Drosophila melanogaster; human; mouse; microRNA; miRNA; cytostatic;
KW gene therapy; diagnostic; therapeutic; developmental modulator;
KW pathogenic modulator; cancer; B-cell chronic leukaemia;
KW tissue reprogramming; ss.
XX
OS Homo sapiens.
OS Mus sp.
XX
XX WO2003029459-A2.
XX
PD 10-APR-2003.
XX
XX 27-SEP-2002; 2002WO-EP010881.
XX
PR 28-SEP-2001; 2001EP-00123453.
PR 22-MAR-2002; 2002EP-00006712.
PR 26-JUL-2002; 2002EP-00016772.
XX
PA (PLAC ) MAX PLANCK GES FOERDERUNG.
XX
PI Tuschl T, Legos-Quintana M, Lendeckel W, Meyer J, Rauhut R;
XX
XX WPI; 2003-381637/36.
XX
XX New nucleic acid molecule for diagnostic and therapeutic applications and
PT as a marker or a modulator of developmental or pathogenic processes, e.g.
PT cancer, comprises microRNAs of a Drosophila melanogaster, a human or a
PT mouse.
XX
PS Claim 1; Page 37; 138pp; English.
XX
CC The present invention describes an isolated nucleic acid molecule (I)
CC comprising a nucleotide sequence of Drosophila melanogaster, human or
CC mouse microRNAs (miRNAs), or their precursors, a complement of it, a
CC nucleotide sequence that has an affinity of at least 80 % to them or a
CC nucleotide sequence that hybridises under stringent conditions to them.
CC Also described: (1) a pharmaceutical composition containing the nucleic
CC acid and, optionally, a carrier; and (2) identifying miRNA molecules or
CC precursor molecules, comprising ligating 5'- and 3'-adapter molecules to
CC the ends of a size-fractionated RNA population, reverse transcribing the
CC adapter-containing RNA population and characterising the reverse
CC transcription products. (II) has cytostatic activity, and can be used in
CC gene therapy. The pharmaceutical composition is useful for diagnostic and
CC therapeutic applications, and as a marker or a modulator of developmental
CC or pathogenic processes, particularly of cancer (e.g. B-cell chronic
CC leukaemia) or gene expression. The miRNA molecules may also be used in
CC tissue reprogramming procedures. The present sequence represents an miRNA
CC sequence from the present invention.
XX
XX Sequence 22 BP; 6 A; 0 C; 10 G; 0 T; 6 U; 0 Other;
SQ

Query Match          0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;

QY 1482 CCACAACTTCTCTGACACTAC 1502
   ||| ||| ||| ||| ||| |||
DB 22 CCACACACTTCTTACATTC 2

RESULT 693
ABX17615
ID ABX17615 standard; DNA; 22 BP.
XX
AC ABX17615;
XX
XX
DT 05-FEB-2003 (first entry)
XX
DE RTQ-PCR primer #1 for human protein NOV27.
XX
KW Human; ss; NOVX; adrenoleukodystrophy; haemophilia; stoke; VHL; PCR;
KW congenital adrenal hyperplasia; haemophilia; hypercoagulation;
KW idiopathic thrombocytopaenic purpura; autoimmune disease; allergy;
KW immunodeficiencies; transplantation; Von Hippel-Lindau syndrome;
KW Alzheimer's disease; tuberosus sclerosis; Parkinson's disease; epilepsy;
KW Huntington's disease; cerebral palsy; Lesch-Nyhan syndrome; pain;
KW multiple sclerosis; ataxia-telangiectasia; leukodystrophy; anxiety;
KW behavioural disorder; addition; neuroprotection; diabetes; ARDS;
KW renal artery stenosis; interstitial nephritis; glomerulonephritis;
KW polycystic kidney disease; systemic lupus erythematosus; IGA; primer;
KW renal tubular acidosis; immunoglobulin A nephropathy; hypercalcaemia;
KW cirrhosis; transplantation; asthma; emphysema; scleroderma; GVHD;
KW adult respiratory distress syndrome; graft versus host disease;
KW lymphedema; fertility; pancreatitis; obesity; haemophilia; ulcer;
KW anaemia; cancer; trauma; regeneration; infection; RTQ-PCR;
KW real-time quantitative PCR.
XX
XX Homo sapiens.
OS
XX WO200281629-A2.
XX
PD 17-OCT-2002.
XX
XX
PF 03-APR-2002; 2002WO-US010522.
XX
PR 03-APR-2001; 2001US-0281086P.
PR 03-APR-2001; 2001US-0281136P.
PR 05-APR-2001; 2001US-0281863P.
PR 06-APR-2001; 2001US-0281906P.
PR 10-APR-2001; 2001US-0282020P.
PR 12-APR-2001; 2001US-0282934P.
PR 19-APR-2001; 2001US-0283512P.
PR 23-APR-2001; 2001US-0285325P.
PR 24-APR-2001; 2001US-0285890P.
PR 25-APR-2001; 2001US-0286068P.
PR 27-APR-2001; 2001US-0286292P.
PR 02-MAY-2001; 2001US-0287213P.
PR 12-MAY-2001; 2001US-0288257P.
PR 17-MAY-2001; 2001US-0291134P.
PR 31-MAY-2001; 2001US-0291725P.
PR 08-JUN-2001; 2001US-0294771P.
PR 18-JUN-2001; 2001US-0296965P.
PR 12-JUL-2001; 2001US-0299128P.
PR 14-NOV-2001; 2001US-0305063P.
PR 04-JAN-2002; 2001US-0332780P.
PR 02-APR-2002; 2002US-0345221P.
XX
XX (CURA-) CURAGEN CORP.
PA
XX
PI Spytek KA, Li L, Edinger SR, Ellerman K, Stone DJ, Malyankar UM;
PI Shinkets RA, Guo X, Anderson DW, Patturajan M, Berghs C, Gerlach V;
PI Taupier RJ, Pena CEA, Padigaru M, Liu Y, Burgess CE, Miller CE;
PI Gusev VY, Kekuda R, Gorman L, Zerhusen BD, Baumgartner JC;
PI Tchernev VT, Vernet CAM, Smithson G, Heyes MP, Shenoy SG, Liu X;
PI Gangolli EA;
```

XX WPI; 2003-046863/04.
 DR
 XX
 XX New polypeptides, designated NOVX polypeptides, useful for treating
 PT hemophilia, idiopathic thrombocytopenic purpura, autoimmune disease,
 PT allergies, transplantation, Alzheimer's disease and stroke.
 XX
 XX Example C; Page 298; 320pp; English.
 PS
 XX
 XX The invention relates to an isolated NOVX polypeptide selected from NOV1-
 CC NOV27 polypeptides, a mature form of NOVX, a variant of NOVX or a
 CC fragment of NOVX. Also included are determining the presence or amount of
 CC NOVX in a sample (by using an antibody that immunospecifically bind to
 CC the polypeptide), determining the presence of or predisposition to
 CC disease associated with altered levels of NOVX in a first mammalian
 CC subject, identifying a potential therapeutic agent for use in the
 CC treatment of pathology related to aberrant expression of physiological
 CC interactions of NOVX, screening for a modulator of activity or of latency
 CC or predisposition to a pathology associated with NOVX, the nucleic acid
 CC encoding NOVX, vectors and host cells. NOVX is useful for identifying an
 CC agent (a cellular receptor or downstream effector) that binds to NOVX.
 CC NOVX and NOVX nucleic acids are useful for treating or preventing NOVX-
 CC associated disorders in humans, and in the manufacture of a medicament
 CC for treating a NOVX related disease human disease e.g.
 CC adrenoleukodystrophy, congenital adrenal hyperplasia, haemophilia,
 CC hypercoagulation, idiopathic thrombocytopenic purpura, autoimmune
 CC disease, allergies, immunodeficiencies, transplantation, Von Hippel-
 CC Lindau (VHL) syndrome, Alzheimer's disease, stroke, tuborous sclerosis,
 CC Parkinson's disease, Huntington's disease, cerebral palsy, epilepsy,
 CC Lesh-Nyhan syndrome, multiple sclerosis, ataxia-telangiectasia,
 CC leukodystrophies, behavioural disorders, addiction, anxiety, pain,
 CC neuroprotection, diabetes, renal artery stenosis, interstitial nephritis,
 CC glomerulonephritis, polycystic kidney disease, systemic lupus
 CC erythematosus, renal tubular acidosis, immunoglobulin (Ig) A nephropathy,
 CC hypercalcaemia, cirrhosis, transplantation, asthma, emphysema,
 CC scleroderma, adult respiratory distress syndrome (ARDS), graft versus
 CC host disease (GVHD), lymphedema, fertility, pancreatitis, obesity,
 CC haemophilia, ulcers, anaemia, cancer, trauma, regeneration, and viral,
 CC bacterial or parasitic infections. The present sequence is a real-time
 CC quantitative (RTQ)-PCR primer used to determine the tissue specific
 CC expression of a NOVX mRNA
 XX
 XX Sequence 22 BP; 9 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.6; DB 1; Length 22;
 Best Local Similarity 81.0%; Pred. No. 8e+02; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 600 TGGGAACTGGAGACCTACAT 620
 Db 2 TAGGAATAGGACCTACAT 22
 RESULT 694
 ADC26573
 ID ADC26573 standard; DNA; 22 BP.
 XX
 XX ADC26573;
 AC
 XX
 XX 18-DEC-2003 (first entry)
 DT
 XX
 XX PCR primer P1 used to amplify human apolipoprotein E DNA.
 DE
 XX
 XX sickle cell anaemia; beta-thalassaemia; alpha-thalassaemia;
 KW phenylketonuria; haemophilia; alpha-anti trypsin deficiency;
 KW cystic fibrosis; cancer; plant; animal breeding; PCR; primer; P1; human;
 KW apolipoprotein E; ApoE; ss.
 XX
 OS Homo sapiens.
 XX
 XX US2003082530-A1.
 FN
 XX
 XX 01-MAY-2003.
 PD

XX
 PF 05-JUN-1995; 95US-00465322.
 XX
 PR 16-FEB-1990; 90US-00482005.
 PR 15-FEB-1991; 91US-00656575.
 PR 02-DEC-1993; 93US-00162376.
 XX
 XX (SODE/) SODERLUND H E.
 PA (SYVA/) SYVANEN A.
 PA
 XX Soderlund HB, Syvanen A;
 XX
 XX WPI; 2003-708522/67.
 DR
 XX
 XX Detecting a specific nucleotide variation at a defined site in a target
 PT nucleic acid polymer, useful for pre- or postnatal diagnosis of diseases,
 PT comprises extending the detection primer using labeled nucleotide
 PT triphosphates.
 XX
 XX Example 1; Page 5; 16pp; English.
 PS
 XX
 XX The invention relates to a novel method for detecting a specific
 CC nucleotide variation at a defined site in a target nucleic acid polymer,
 CC where a second nucleotide residue replaces the first nucleotide residue,
 CC comprising extending the detection primer using a polymerising agent in a
 CC mixture containing one or more nucleoside triphosphates (NTPs) and
 CC detecting the incorporation of the NTP. The method of the invention may
 CC be useful for identifying specific point mutations and genetic
 CC variations, such as those associated with sickle cell anaemia, beta- and
 CC alpha-thalassaemia, phenylketonuria, haemophilia, alpha-anti trypsin
 CC deficiency and cystic fibrosis. Specifically, the method may be used for
 CC pre- or postnatal diagnosis of hereditary predispositions or diseases,
 CC for the detection of somatic mutations in cancer, for the selection of
 CC cells and strains for industrial biotechnology and for plant and animal
 CC breeding. The method comprises few and easily performed procedures, thus
 CC is especially suited for routine determinations of point mutations and
 CC nucleotide variations and allows the quantification of the proportion of
 CC mutated cells in a sample as well as the identification of mutations
 CC present in as little as 0.5% of the analysed cell population. The current
 CC sequence is that of the PCR primer P1 of the invention which was used to
 CC amplify human apolipoprotein E (ApoE) DNA.
 XX
 XX Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.6; DB 1; Length 22;
 Best Local Similarity 81.0%; Pred. No. 8e+02; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1301 AGGAGTTCAAGACATCAACT 1321
 Db 2 AGGAGTTGAGGCTTCAAAAT 22
 RESULT 695
 ADD72131
 ID ADD72131 standard; DNA; 22 BP.
 XX
 XX ADD72131;
 AC
 XX
 XX 29-JAN-2004 (first entry)
 DT
 XX
 XX Human NOV1 RTQ PCR set Agi865 primer #1.
 DE
 XX
 XX Human; ss; PCR; NOVX; endozepine-like protein; metabolic disorder;
 KW diabetes; obesity; infectious disease; anorexia; cancer;
 KW cardiovascular disease; hypertension; atherosclerosis;
 KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
 KW epilepsy; immune disorder; osteoarthritis; haematopoietic disorder;
 KW inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis;
 KW cell differentiation; cell proliferation; haematopoiesis; wound healing;
 KW angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.
 XX
 OS Homo sapiens.
 XX

```

XX PN US2003195149-A1.
XX PD 16-OCT-2003.
XX PF 29-NOV-2001; 2001US-00997594.
XX PR 29-NOV-2000; 2000US-0253834P.
XX PR 25-JAN-2001; 2001US-0264180P.
XX PR 20-AUG-2001; 2001US-0313656P.
XX PA (GANG/) GANGOLLI E A.
XX PA (STON/) STONE D J.
XX PI Gangolli EA, Stone DJ;
XX PI WPI; 2003-844478/78.
XX DR
XX XX New isolated NOVX polypeptides and polynucleotides, useful for
XX PT preventing, diagnosing or treating NOVX-associated disorders, e.g.
XX PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
XX PT asthma, or infections.
XX XX
XX PS Example 4; SEQ ID NO 18; 89pp; English.
XX CC
XX CC The invention relates to an isolated NOVX polypeptide comprising 3 NOV1
XX CC protein variants (NOV1a, NOV1c and NOV1d) and NOV2 (appearing as
XX CC ADD72118, ADD72120 and ADD72123, all being endopeptinase-like proteins); a
XX CC mature form of NOVX; or a sequence that is at least 95% identical to, or
XX CC having one or more conservative amino acid substitutions in, the NOVX
XX CC proteins. Also included are a composition comprising NOVX and a carrier,
XX CC methods for determining the presence of or predisposition to a disease
XX CC associated with altered levels of expression of NOVX or NOVX nucleic acid
XX CC molecule in a first mammalian subject, a method of identifying an agent
XX CC that binds to NOVX, a method for identifying a potential therapeutic
XX CC agent for use in the treatment of a pathology which is related to
XX CC aberrant expression or interactions of NOVX, a method for screening for a
XX CC modulator of activity or of latency or predisposition to a pathology
XX CC associated with NOVX, a method for modulating the activity of NOVX,
XX CC methods of treating or preventing a pathology associated with NOVX, a
XX CC method for treating a pathological state in a mammal, an isolated nucleic
XX CC acid molecule encoding NOVX (including their variants), a vector
XX CC comprising the nucleic acid molecule, a cell comprising the vector, an
XX CC antibody that binds immunospecifically to NOVX and a method for producing
XX CC NOVX. The polypeptides, nucleic acid molecules and antibodies are useful
XX CC in the manufacture of a medicament for treating a syndrome associated
XX CC with a human disease, preferably a NOVX-associated disorder. The nucleic
XX CC acid molecules, polypeptides and antibodies are useful for treating,
XX CC preventing or diagnosing diseases such as metabolic disorders, diabetes,
XX CC obesity, infectious diseases (viral, bacterial, fungal, helminthic, and
XX CC protozoal), anorexia, cancer, cardiovascular diseases (hypertension,
XX CC atherosclerosis), neurodegenerative disorders, Alzheimer's disease,
XX CC Parkinson's disease, epilepsy, immune disorders (osteoarthritis),
XX CC haematopoietic disorders, inflammatory skin disorders, asthma, and
XX CC various dyslipidaemias. The nucleic acids and polypeptides may also be
XX CC used as targets for the identification of small molecules that modulate
XX CC or inhibit e.g. neurogenesis, cell differentiation, cell proliferation,
XX CC haematopoiesis, wound healing and angiogenesis, in gene therapy, in
XX CC generation of antibodies that bind immunospecifically to NOVX substances
XX CC for use in therapeutic or diagnostic methods. The nucleic acids are
XX CC further used as hybridisation probes, in chromosome mapping, tissue
XX CC typing, preventive medicine, and pharmacogenomics. The present sequence
XX CC represents an RTQ (real time quantitative) PCR primer used to assay
XX CC tissue/cell specific expression of NOVX.
XX SQ Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

```

Query Match 0.8%; Score 14.6; DB 1; Length 22;

Best Local Similarity 81.0%; Pred. No. 8e+02; Indels 0; Gaps 0;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

886 GGAACATCATCAACATGAC 906

|||||

```

Db 2 GGCATAATCATCAACATCAAC 22
RESULT 696
ADD72152
ID ADD72152 standard; DNA; 22 BP.
XX AC
XX AC ADD72152;
XX DT 29-JAN-2004 (first entry)
XX XX
XX DE Human NOV2 RTQ PCR set Ag1865 primer #1.
XX DE
XX KW Human; ss; PCR; NOVX; endopeptinase-like protein; metabolic disorder;
XX KW diabetes; obesity; infectious disease; anorexia; cancer;
XX KW cardiovascular disease; hypertension; atherosclerosis;
XX KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
XX KW epilepsy; immune disorder; osteoarthritis; haematopoietic disorder;
XX KW inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis;
XX KW cell differentiation; cell proliferation; haematopoiesis; wound healing;
XX KW angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.
XX OS Homo sapiens.
XX XX
XX PN US2003195149-A1.
XX PD 16-OCT-2003.
XX PF 29-NOV-2001; 2001US-00997594.
XX PR 29-NOV-2000; 2000US-0253834P.
XX PR 25-JAN-2001; 2001US-0264180P.
XX PR 20-AUG-2001; 2001US-0313656P.
XX PA (GANG/) GANGOLLI E A.
XX PA (STON/) STONE D J.
XX PI Gangolli EA, Stone DJ;
XX PI WPI; 2003-844478/78.
XX DR
XX XX New isolated NOVX polypeptides and polynucleotides, useful for
XX PT preventing, diagnosing or treating NOVX-associated disorders, e.g.
XX PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
XX PT asthma, or infections.
XX PS Example 4; SEQ ID NO 39; 89pp; English.
XX CC
XX CC The invention relates to an isolated NOVX polypeptide comprising 3 NOV1
XX CC protein variants (NOV1a, NOV1c and NOV1d) and NOV2 (appearing as
XX CC ADD72118, ADD72120 and ADD72123, all being endopeptinase-like proteins); a
XX CC mature form of NOVX; or a sequence that is at least 95% identical to, or
XX CC having one or more conservative amino acid substitutions in, the NOVX
XX CC proteins. Also included are a composition comprising NOVX and a carrier,
XX CC methods for determining the presence of or predisposition to a disease
XX CC associated with altered levels of expression of NOVX or NOVX nucleic acid
XX CC molecule in a first mammalian subject, a method of identifying an agent
XX CC that binds to NOVX, a method for identifying a potential therapeutic
XX CC agent for use in the treatment of a pathology which is related to
XX CC aberrant expression or interactions of NOVX, a method for screening for a
XX CC modulator of activity or of latency or predisposition to a pathology
XX CC associated with NOVX, a method for modulating the activity of NOVX,
XX CC methods of treating or preventing a pathology associated with NOVX, a
XX CC method for treating a pathological state in a mammal, an isolated nucleic
XX CC acid molecule encoding NOVX (including their variants), a vector
XX CC comprising the nucleic acid molecule, a cell comprising the vector, an
XX CC antibody that binds immunospecifically to NOVX and a method for producing
XX CC NOVX. The polypeptides, nucleic acid molecules and antibodies are useful
XX CC in the manufacture of a medicament for treating a syndrome associated
XX CC with a human disease, preferably a NOVX-associated disorder. The nucleic
XX CC acid molecules, polypeptides and antibodies are useful for treating,
XX CC preventing or diagnosing diseases such as metabolic disorders, diabetes,
XX CC obesity, infectious diseases (viral, bacterial, fungal, helminthic, and
XX CC protozoal), anorexia, cancer, cardiovascular diseases (hypertension,
XX CC atherosclerosis), neurodegenerative disorders, Alzheimer's disease,
XX CC Parkinson's disease, epilepsy, immune disorders (osteoarthritis),
XX CC haematopoietic disorders, inflammatory skin disorders, asthma, and
XX CC various dyslipidaemias. The nucleic acids and polypeptides may also be
XX CC used as targets for the identification of small molecules that modulate
XX CC or inhibit e.g. neurogenesis, cell differentiation, cell proliferation,
XX CC haematopoiesis, wound healing and angiogenesis, in gene therapy, in
XX CC generation of antibodies that bind immunospecifically to NOVX substances
XX CC for use in therapeutic or diagnostic methods. The nucleic acids are
XX CC further used as hybridisation probes, in chromosome mapping, tissue
XX CC typing, preventive medicine, and pharmacogenomics. The present sequence
XX CC represents an RTQ (real time quantitative) PCR primer used to assay
XX CC tissue/cell specific expression of NOVX.

```



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XX PF 29-NOV-2001; 2001US-00997594.
XX PR 29-NOV-2000; 2000US-0253834P.
XX PR 25-JAN-2001; 2001US-0264180P.
XX PR 20-AUG-2001; 2001US-0313656P.
XX PA (GANG/) GANGOLLI E A.
XX PA (STON/) STONE D J.
XX PI Gangolli EA, Stone DJ;
XX DR WPI; 2003-844478/78.
XX PT New isolated NOVX polypeptides and polynucleotides, useful for
XX PT preventing, diagnosing or treating NOVX-associated disorders, e.g.
XX PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
XX PT asthma, or infections.
XX PS Example 4; SEQ ID NO 33; 89pp; English.
XX CC The invention relates to an isolated NOVX polypeptide comprising 3 NOV1
XX CC protein variants (NOV1a, NOV1c and NOV1d) and NOV2 (appearing as
XX CC ADD721118, ADD721120 and ADD721123, all being endopeptinase-like proteins); a
XX CC mature form of NOVX; or a sequence that is at least 95% identical to, or
XX CC having one or more conservative amino acid substitutions in, the NOVX
XX CC proteins. Also included are a composition comprising NOVX and a carrier,
XX CC methods for determining the presence of or predisposition to a disease,
XX CC associated with altered levels of expression of NOVX or NOVX nucleic acid
XX CC molecule in a first mammalian subject, a method of identifying an agent
XX CC that binds to NOVX, a method for identifying a potential therapeutic
XX CC agent for use in the treatment of a pathology which is related to
XX CC aberrant expression or interactions of NOVX, a method for screening for a
XX CC modulator of activity or of latency or predisposition to a pathology
XX CC associated with NOVX, a method for modulating the activity of NOVX, a
XX CC method of treating or preventing a pathology associated with NOVX, a
XX CC method for treating a pathological state in a mammal, an isolated nucleic
XX CC acid molecule encoding NOVX (including their variants), a vector
XX CC comprising the nucleic acid molecule, a cell comprising the vector, an
XX CC antibody that binds immunospecifically to NOVX and a method for producing
XX CC NOVX. The polypeptides, nucleic acid molecules and antibodies are useful
XX CC in the manufacture of a medicament for treating a syndrome associated
XX CC with a human disease, preferably a NOVX-associated disorder. The nucleic
XX CC acid molecules, polypeptides and antibodies are useful for treating,
XX CC preventing or diagnosing diseases such as metabolic disorders, diabetes,
XX CC obesity, infectious diseases (viral, bacterial, fungal, helminthic, and
XX CC protozoal), anorexia, cancer, cardiovascular diseases (hypertension,
XX CC atherosclerosis), neurodegenerative disorders, Alzheimer's disease,
XX CC Parkinson's disease, epilepsy, immune disorders (osteoarthritis),
XX CC haematopoietic disorders, inflammatory skin disorders, asthma, and
XX CC various dyslipidaemias. The nucleic acids and polypeptides may also be
XX CC used as targets for the identification of small molecules that modulate
XX CC or inhibit e.g. neurogenesis, cell differentiation, cell proliferation,
XX CC haematopoiesis, wound healing and angiogenesis, in gene therapy, in
XX CC generation of antibodies that bind immunospecifically to NOVX substances
XX CC for use in therapeutic or diagnostic methods. The nucleic acids are
XX CC further used as hybridisation probes, in chromosome mapping, tissue
XX CC typing, preventive medicine, and pharmacogenomics. The present sequence
XX CC represents an RTQ (real time quantitative) PCR primer used to assay
XX CC tissue/cell specific expression of NOVX.
XX SQ Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 886 GGGACATCATCAACATGCAC 906
||| ||||| ||||| ||||| |||||
Db 2 GCGAAATCATCAACATCAAC 22

RESULT 699
```

```
ADM31242
ID ADM31242 standard; DNA; 22 BP.
XX AC ADM31242;
XX DT 20-MAY-2004 (first entry)
XX DE Human apolipoprotein E PCR primer P1.
XX KW Human; ss; PCR; primer; apolipoprotein E; ApoE; nucleotide variation;
XX KW genetic disorder; point mutation; prenatal diagnosis;
XX KW postnatal diagnosis; somatic mutation; cancer.
XX OS Homo sapiens.
XX PN US2003082531-A1.
XX PD 01-MAY-2003.
XX PF 26-FEB-1999; 99US-00258216.
XX PR 16-FEB-1990; 90US-00482005.
XX PR 15-FEB-1991; 91US-00656575.
XX PR 02-DEC-1993; 93US-00162376.
XX PA (SODE/) SODERLUND H E.
XX PA (SYVA/) SYVANEN A.
XX PI Soderlund HE, Syvanen A;
XX WPI; 2003-596956/56.
XX PT Detecting a specific nucleotide variation at a defined site in a target
XX PT nucleic acid polymer, useful for pre- or postnatal diagnosis of diseases,
XX PT comprises extending the detection primer using labeled nucleotide
XX PT triphosphates.
XX PS Example 1; Page 5; 16pp; English.
XX CC The invention relates to detecting a specific nucleotide variation at a
XX CC defined site in a target nucleic acid polymer, where a second nucleotide
XX CC residue replaces the first nucleotide residue, comprises hybridising a
XX CC detectable amount of a target nucleic acid polymer in single-stranded
XX CC form with an oligonucleotide primer (where the detection primer comprises
XX CC several nucleotide residues and is complementary to the nucleotide
XX CC sequence of interest in a region disposed toward the 3' end from the
XX CC defined site such that when the primer is hybridised to the polymer,
XX CC there are no nucleotide residues between the defined site and the 3' end
XX CC of the primer that are identical to the first or second nucleotide
XX CC residues to be detected), extending the primer using a polymerising agent
XX CC in a mixture containing one or more NTPs (and at least one NTP
XX CC complementary to either the first or second nucleotide residue that
XX CC comprises a means for detecting the incorporation of the NTP in a nucleic
XX CC acid polymer and optionally one or more chain terminating NTPs) and
XX CC detecting the incorporation of the NTP, where the identity of the
XX CC nucleotide residue at the defined site is determined. Also included are
XX CC detecting in a patient a predisposition to a genetic disorder resulting
XX CC from a specific nucleotide variation at a defined site in a genetic
XX CC material of the patient by employing the steps of the method above, a kit
XX CC for determining the specific nucleotide variations in a target nucleic
XX CC acid polymer, a reagent for detecting the presence of a point mutation in
XX CC which a normal nucleic acid residue is replaced by an abnormal nucleic
XX CC acid residue at a defined site within gene of interest, detecting at a
XX CC defined site in the genome of a microorganism the existence of point
XX CC mutations leading to altered pathogenicity or resistance to therapy in
XX CC microorganisms and detecting cells having a point mutation at a defined
XX CC site in the genetic material. The method is useful for identifying
XX CC specific point mutations and genetic variations. Specifically, the method
XX CC can be used for pre- or postnatal diagnosis of hereditary predispositions
XX CC or diseases, for the detection of somatic mutations in cancer, for the
XX CC selection of cells and strains for industrial biotechnology and for plant
XX CC and animal breeding. The new method provides several advantages over
XX CC prior methods. The new method comprises few and easily performed
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CC procedures, thus especially suited for routine determinations of point
CC mutations and nucleotide variations, allows the quantification of the
CC proportion of mutated cells in a sample as well as the identification of
CC mutations present in as little as 0.5% of the analysed cell population,
CC and is easily automated. The present sequence is a PCR primer used in the
CC method of the invention to detect polymorphisms in the apolipoprotein
CC gene corresponding to amino acids 112 and 158.

XX Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;

Best Local Similarity 81.0%; Pred. No. 8e+02;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1301 AGGAGTTTCAGACATACAACT 1321

||||| ||| ||| ||| |||

Db 2 AGGAGTTGAAGGCGCTCAAAAT 22

RESULT 700

ADH42887

ID ADH42887 standard; DNA; 22 BP.

XX AC

ADH42887;

XX DT

25-MAR-2004 (first entry)

XX DE Novel human nucleic acid NOVX gene probe Agl17 forward primer.

XX cardiovascular; antiarteriosclerotic; hypotensive; cytostatic; anorectic;
KW antidiabetic; immunosuppressive; anti-HIV; neuroprotective; nootropic;
KW antiparkinsonian; antiasthmatic; antiinfertility; cardiomyopathy;
KW atherosclerosis; hypertension; cancer; obesity; diabetes; AIDS;
KW Multiple sclerosis; graft-versus-host disease; Alzheimer's disease;
KW Parkinson's disease; asthma; fertility disorder; chromosome mapping;
KW tissue typing; preventive medicine; pharmacogenomic; vaccine; primer; ss.
XX Homo sapiens.

XX WO2003102159-A2.

XX PD 11-DEC-2003.

XX PF 04-JUN-2003; 2003WO-US017573.

XX PR 04-JUN-2002; 2002US-0385490P.

XX PR 04-JUN-2002; 2002US-0385615P.

XX PR 04-JUN-2002; 2002US-0385755P.

XX PR 05-JUN-2002; 2002US-0386041P.

XX PR 06-JUN-2002; 2002US-0386355P.

XX PR 06-JUN-2002; 2002US-0386357P.

XX PR 06-JUN-2002; 2002US-0386447P.

XX PR 06-JUN-2002; 2002US-0386459P.

XX PR 06-JUN-2002; 2002US-0386465P.

XX PR 06-JUN-2002; 2002US-0386864P.

XX PR 07-JUN-2002; 2002US-0386701P.

XX PR 07-JUN-2002; 2002US-0386796P.

XX PR 07-JUN-2002; 2002US-0386931P.

XX PR 07-JUN-2002; 2002US-0387078P.

XX PR 07-JUN-2002; 2002US-0387081P.

XX PR 07-JUN-2002; 2002US-0387083P.

XX PR 10-JUN-2002; 2002US-0387429P.

XX PR 10-JUN-2002; 2002US-0387540P.

XX PR 10-JUN-2002; 2002US-0387866P.

XX PR 11-JUN-2002; 2002US-0387606P.

XX PR 11-JUN-2002; 2002US-0387610P.

XX PR 11-JUN-2002; 2002US-0387659P.

XX PR 11-JUN-2002; 2002US-0387668P.

XX PR 11-JUN-2002; 2002US-0387696P.

XX PR 11-JUN-2002; 2002US-0387859P.

XX PR 12-JUN-2002; 2002US-0387934P.

XX PR 12-JUN-2002; 2002US-0387960P.

XX PR 12-JUN-2002; 2002US-0388022P.

PR 12-JUN-2002; 2002US-0388096P.
PR 12-JUN-2002; 2002US-0388432P.
PR 12-JUN-2002; 2002US-0388479P.
PR 13-JUN-2002; 2002US-0389123P.
PR 14-JUN-2002; 2002US-0389120P.
PR 14-JUN-2002; 2002US-0389146P.
PR 17-JUN-2002; 2002US-0389742P.
PR 18-JUN-2002; 2002US-0389604P.
PR 18-JUN-2002; 2002US-0389884P.
PR 19-JUN-2002; 2002US-0390006P.
PR 19-JUN-2002; 2002US-0390144P.
PR 19-JUN-2002; 2002US-0390209P.
PR 25-JUN-2002; 2002US-0391726P.
PR 06-AUG-2002; 2002US-0401628P.
PR 09-AUG-2002; 2002US-040268P.
PR 12-AUG-2002; 2002US-0402822P.
PR 13-AUG-2002; 2002US-0403458P.
PR 15-AUG-2002; 2002US-0403617P.
PR 15-AUG-2002; 2002US-0403732P.
PR 26-AUG-2002; 2002US-0406182P.
PR 12-SEP-2002; 2002US-0410085P.
PR 13-SEP-2002; 2002US-0410505P.
PR 23-SEP-2002; 2002US-0412955P.
PR 30-SEP-2002; 2002US-0415195P.
PR 23-OCT-2002; 2002US-0420627P.
PR 23-OCT-2002; 2002US-0420718P.
PR 24-OCT-2002; 2002US-0420852P.
PR 31-OCT-2002; 2002US-0422750P.
PR 01-NOV-2002; 2002US-0423095P.
PR 05-NOV-2002; 2002US-0423748P.

XX (CURA-) CURAGEN CORP.

PA Alsobrook JP, Anderson DM, Baumgartner JC, Berghs C, Boldog FL;

PI Burgess CE, Casman SU, Catterton E, Dhanabal M, Edinger SR;

PI Ellermeier K, Gangolli EA, Gerlach VL, Gorman L;

PI Grosse WM, Gunther E, Guo X, Gusev VY, Herrmann JL, Ji W, Kekuda R;

PI Khrantsov NV, Larochele WJ, Li L, Liang H, Low K, Macdougall JR;

PI MacLachlan T, Malyankar UM, McQueeney K, Mezick AJ, Miller CE;

PI Millet I, Padigaru M, Patturajan M, Peyman JA, Qian X, Rastelli L;

PI Rieger DK, Rothenberg ME, Shenoy SG, Shimkets RA, Smithson G;

PI Spytek XA, Stone DJ, Sukumaran S, Szekeres ES, Vernet CAM, Voss EZ;

PI Wolenc AR, Zhong M, Zhong H;

XX WPI; 2004-053467/05.

XX New NOVX polypeptides and nucleic acid molecules useful for preventing or
XX treating NOVX-associated disorders, e.g. cancer, cardiomyopathy,
XX atherosclerosis or diabetes, in chromosome mapping, tissue typing or in
XX pharmacogenomics.

XX Disclosure; SEQ ID NO 1440; 1503pp; English.

XX The invention relates to 566 new isolated human polypeptides and their
XX encoding genes, sequences that are at least 95% identical to these or
XX sequences comprising one or more conservative substitutions in these. The
XX polypeptide, polynucleotide and antibodies against the polypeptides are
XX useful in diagnosing, treating or preventing NOVX-associated disorders,
XX e.g. cardiomyopathy, atherosclerosis, hypertension, cancer, obesity,
XX diabetes, AIDS, multiple sclerosis, graft-versus-host disease,
XX Alzheimer's disease, Parkinson's disease, asthma, or fertility disorders.
XX The nucleic acids are further used as hybridization probes, in chromosome
XX mapping, tissue typing, preventive medicine, and pharmacogenomics. The
XX polypeptides are also useful as vaccines. This sequence represents an
XX example of the forward primer used to amplify a probe to isolate the
XX nucleic acid sequences of the invention.

SQ Sequence 22 BP; 9 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;

Best Local Similarity 81.0%; Pred. No. 8e+02;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;


```
QY 600 TGGAACTGGAGACCTACAT 620
Db 2 TAGGAAATGGAGCCTACAT 22

RESULT 701
AD119085
ID AD119085 standard; DNA; 22 BP.
XX
AC AD119085;
XX
DT 15-APR-2004 (first entry)
XX
DE Rat DERP DNA amplifying RT-PCR primer #18.
XX
KW Detrusor estrogen-regulated protein; DERP; DERP-related disorder;
KW impaired detrusor contractility; urinary retention; Alzheimer's disease;
KW cardiovascular disease; osteoporosis; smooth muscle function; nootropic;
KW neuroprotective; osteopathic; immunostimulant; therapy; rat; RT-PCR;
KW reverse transcription; primer; ss.
XX
OS Rattus norvegicus.
XX
FN US2003232374-A1.
XX
PD 18-DEC-2003.
XX
PF 22-MAY-2003; 2003US-00444575.
XX
PR 23-MAY-2002; 2002US-0382830P.
XX
PA (KUCH/) KUCHEL G A.
PA (ZHUQ/) ZHU Q.
XX
PI Kuchel GA, Zhu Q;
XX
DR WPI; 2004-052160/05.
XX
PT Novel purified immunogenic detrusor estrogen-regulated polypeptide
PT fragment useful for generating antibodies and as screening reagents.
XX
PS Claim 24; SEQ ID NO 35; 48pp; English.
XX
CC The present invention relates to a immunogenic polypeptide fragment
CC comprising ten to fifty consecutive amino acids of a fully defined
CC detrusor estrogen-regulated protein (DERP). The invention is useful for
CC diagnosing DERP-related disorder such as impaired detrusor contractility,
CC urinary retention, Alzheimer's disease, cardiovascular disease,
CC osteoporosis, or their combinations. The invention is also useful for
CC generating antibodies, as reagents in diagnostic assays, as identifiers
CC of other gene products involved in the regulation of bladder and smooth
CC muscle function, as screening reagents useful for detecting compounds
CC that are used in the regulation of bladder and smooth muscle function,
CC and as pharmaceutical agents useful for treating symptoms relating to
CC bladder and smooth muscle function. The present sequence is rat DERP DNA
CC amplifying reverse transcription (RT)-PCR primer.
XX
SQ Sequence 22 BP; 7 A; 6 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 957 CCGGAGAGGTGCTACACCG 977
Db 1 CAGGAGAAGAGGTATACCG 21

RESULT 702
ADK96694/C
ID ADK96694 standard; DNA; 22 BP.
XX
AC ADK96694;

QY 06-MAY-2004 (first entry)
XX
DE Primer of the invention #2414.
XX
KW human; single nucleotide polymorphism; SNP; ss; primer.
XX
OS Synthetic.
XX
FN JP2003259875-A.
XX
PD 16-SEP-2003.
XX
PF 08-MAR-2002; 2002JP-00064373.
XX
PR 08-MAR-2002; 2002JP-00064373.
XX
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR WPI; 2004-093977/10.
XX
PT Novel polynucleotide useful for PCR amplification along with two DNA
PT fragment from another set of sequences, or for detecting single
PT nucleotide polymorphism in human gene.
XX
PS Claim 2; SEQ ID NO 5723; 2627pp; Japanese.
XX
CC The present invention relates to a polynucleotide isolated from a human
CC gene and is useful for detecting a single nucleotide polymorphism in a
CC human gene or for diagnosing of disease. The invention enables the
CC detection of a single nucleotide polymorphism in a human gene. The
CC present sequence represents a primer of the invention.
XX
SQ Sequence 22 BP; 8 A; 2 C; 10 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1450 CATCATCTCTCTCCAGTCTG 1470
Db 22 CATCGCTCTCTCTCTATCTG 2

RESULT 703
ADP84297/C
ID ADP84297 standard; DNA; 22 BP.
XX
AC ADP84297;
XX
DT 23-SEP-2004 (first entry)
XX
DE PCR primer JEGE1P2 used for cloning human GPRA DNA.
XX
KW ss; AST-1; asthma; IgE mediated disease; human; GPRA;
KW G-protein coupled receptor for asthma susceptibility; AAAL1;
KW asthma associated alternatively spliced gene 1; primer; PCR;
KW chronic obstructive pulmonary disease; cancer; rhinitis; dermatitis;
KW cystostatic; antiasthmatic; transgenic; asthma locus-1.
XX
OS Homo sapiens.
XX
FN WO2004056866-A1.
XX
PD 08-JUL-2004.
XX
PF 19-DEC-2003; 2003WO-FI000973.
XX
PR 20-DEC-2002; 2002US-0435846P.
PR 03-JAN-2003; 2003US-0437895P.
PR 26-MAR-2003; 2003US-0458767P.
PR 09-JUL-2003; 2003US-0486000P.
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Query Match          0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1273 GAGACGTGGCCAGGCA 1288
DB 17 GAGACTTGGCCAGGCA 2

RESULT 706
AAT10550/c
ID AAT10550 standard; DNA; 17 BP.
XX
AC AAT10550;
XX
DT 25-MAR-2003 (revised)
DT 18-JUL-1996 (first entry)
XX
DE Human IgA membrane anchoring extracellular peptide segment primer #1.
DE
KW Exon; membrane anchoring extracellular peptide; human; immunoglobulin;
KW IgA; constant heavy region; cell surface; lung fibroblast cell line;
KW primer; PCR; amplification; probe; isoform; lung fibroblast cell line;
KW post-transcriptional processing; prophylaxis; infectious disease;
KW allergy; immunodeficiency disease; ds.
XX
OS Synthetic.
XX
FN US5484907-A.
XX
PD 16-JAN-1996.
XX
PF 22-OCT-1993; 93US-00140721.
XX
PR 21-JUN-1989; 89US-00369479.
PR 22-DEC-1989; 89US-00455080.
PR 16-SEP-1991; 91US-00760765.
PR 20-JUL-1993; 93US-00095068.
XX
PA (TANO-) TANOX BIOSYSTEMS INC.
XX
PI Chang NT, Chang TW;
XX
PS WPI; 1996-087117/09.
XX
DR Oligonucleotide(s) corresponding to human IgA segments - comprising
PT membrane anchoring extracellular peptide segments, used to develop prods.
PT for therapy and diagnosis.
XX
PS Example 1; Col 15; 12pp; English.
XX
CC The primers AAT10550-1 were used to amplify the genomic inserts from
CC phages contg. sequences encoding the alpha-1 and alpha-2 isoforms of the
CC membrane anchoring peptide from a human IgA. This primer is based on
CC sequence located in the intron, about 1 kb downstream from the constant
CC heavy chain region 3 exon. The phages were isolated from a human lung
CC fibroblast line library in the phage FIX, using the probe AAT10549. The
CC sequences encoding the extracellular portion of the membrane anchoring
CC peptide (AAR88191) can be used to raise antibodies against the IgA
CC membrane extracellular peptide which can modulate IgA synthesis, esp. to
CC increase their prodn. The peptides and antibodies can be used to treat or
CC in the prophylaxis of infectious diseases, allergies and immunodeficiency
CC diseases. (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match          0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1273 GAGACGTGGCCAGGCA 1288
DB 17 GAGACTTGGCCAGGCA 2

RESULT 707
AAV94784
ID AAV94784 standard; RNA; 17 BP.
XX
AC AAV94784;
XX
DT 24-FEB-1999 (first entry)
XX
DE Human IL-2 receptor g-chain substrate position 1330.
DE
KW Human; IL-2 receptor g-chain; interleukin 2 receptor gamma chain;
KW hammerhead ribozyme; hairpin ribozyme; substrate; expression; cancer;
KW autoimmune disease; psoriasis; allergy; inflammatory disease;
KW graft rejection; ss.
XX
OS Homo sapiens.
XX
FN WO9824913-A2.
XX
PD 11-JUN-1998.
XX
PF 02-DEC-1997; 97WO-US021748.
XX
PR 03-DEC-1996; 96US-00758306.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
FI Stinchcomb DT, Mcswiggen JA;
XX
DR WPI; 1998-333332/29.
XX
PT Ribozymes targetted to interleukin 2 - useful for treating e.g. cancer,
PT autoimmune disease and allergies.
XX
PS Claim 4; Page 37; 61pp; English.
XX
CC The present sequence invention describes ribozymes targeted to modulate
CC the synthesis and/or expression of interleukin (IL)-2R gamma encoded RNA.
CC AAV93889 to AAV94574 represent specifically claimed ribozymes, and
CC AAV94575 to AAV95260 represent specifically claimed substrate sequences
CC from the present invention. The ribozymes can be used for the treatment
CC of, e.g. graft rejection, autoimmune disease, cancer, psoriasis, allergy
CC and other inflammatory conditions. The ribozymes are also used to induce
CC tolerance in a recipient to alloantigen from a donor
XX
SQ Sequence 17 BP; 1 A; 7 C; 3 G; 0 T; 6 U; 0 Other;

Query Match          0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 56.2%; Pred. No. 7e+02;
Matches 9; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

QY 1456 TTCTTCTCTCAGTCGTGG 1471
DB 1 UUCUCCUCCAGUCUGG 16

RESULT 708
AAT86543/c
ID AAT86543 standard; DNA; 17 BP.
XX
AC AAT86543;
XX
DT 25-MAR-2003 (revised)
DT 20-MAR-1998 (first entry)
XX
DE Membrane extracellular peptide fragment of immunoglobulin primer.
DE
KW Membrane bound; immunoglobulin A; anti-IgA antibody; immunogen;
KW B-cell leukemia; lymphoma; IgA-mediated nephropathy; diagnosis; PCR;
KW primer; probe; ss.
XX
```


CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NQO expression. The present
 CC sequence is a G-cleaver molecule of the invention

XX
 SQ Sequence 17 BP; 4 A; 4 C; 6 G; 0 T; 3 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 7e+02; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 395 ATGAGGTGCAGTCTCC 410
 |||||
 Db 17 ATCAGGTGCAGTCTCC 2

RESULT 710
 ABA80084/c
 ID ABA80084 standard; DNA; 17 BP.
 XX
 AC ABA80084;
 XX
 DT 24-JAN-2002 (first entry)
 XX
 DE HBA2 mutation correcting oligonucleotide SEQ ID NO: 2930.
 XX
 KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
 KW haemophilia; alpha thalasassaemia; haemoglobin alpha locus 1; MLH1; APOE;
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
 KW Alzheimer's disease; cytosolic; antislackling; antianaemic; haemostatic;
 KW antilipemic; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO200173002-A2.
 XX
 PD 04-OCT-2001.
 XX
 PF 27-MAR-2001; 2001WO-US009761.
 XX
 PR 27-MAR-2000; 2000US-0192176P.
 PR 27-MAR-2000; 2000US-0192179P.
 PR 01-JUN-2000; 2000US-0208538P.
 PR 30-OCT-2000; 2000US-0244989P.
 XX
 PA (UYDE) UNIV DELAWARE.
 XX
 XX Kmiec EB, Gamper HB, Rice MC;
 FI
 XX WPI; 2001-639230/73.
 DR
 XX Oligonucleotide for targeted alterations of genetic sequences and for
 PT treating cystic fibrosis, comprises at least one mismatch and chemical
 PT modification.
 XX
 PS Claim 7; Page 207; 294pp; English.
 XX
 CC The present invention provides single-stranded oligonucleotides which can
 CC be used for the targeted alteration of genomic sequences, where the
 CC oligonucleotide has at least one mismatch compared with the genomic
 CC sequence to be altered. In particular, these sequences are directed at
 CC the following genes: adenosine deaminase, p53, beta-globin,
 CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
 CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
 CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
 CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
 CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
 CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases

CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
 CC haemophilia, hypercholesterolaemia, thalasassaemia, sickle cell anaemia,
 CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
 CC various syndromes. The present sequence is one of the gene correcting
 CC oligonucleotides of the invention

XX
 SQ Sequence 17 BP; 3 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 7e+02; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 1631 CCAGCAGCGCAGTGGCT 1646
 |||||
 Db 17 CCAGCAGCGCAGTGGCT 2

RESULT 711
 ABA80085
 ID ABA80085 standard; DNA; 17 BP.
 XX
 AC ABA80085;
 XX
 DT 24-JAN-2002 (first entry)
 XX
 DE HBA2 mutation correcting oligonucleotide SEQ ID NO: 2931.
 XX
 KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
 KW haemophilia; alpha thalasassaemia; haemoglobin alpha locus 1; MLH1; APOE;
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
 KW Alzheimer's disease; cytosolic; antislackling; antianaemic; haemostatic;
 KW antilipemic; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO200173002-A2.
 XX
 PD 04-OCT-2001.
 XX
 PF 27-MAR-2001; 2001WO-US009761.
 XX
 PR 27-MAR-2000; 2000US-0192176P.
 PR 27-MAR-2000; 2000US-0192179P.
 PR 01-JUN-2000; 2000US-0208538P.
 PR 30-OCT-2000; 2000US-0244989P.
 XX
 PA (UYDE) UNIV DELAWARE.
 XX
 XX Kmiec EB, Gamper HB, Rice MC;
 FI
 XX WPI; 2001-639230/73.
 DR
 XX Oligonucleotide for targeted alterations of genetic sequences and for
 PT treating cystic fibrosis, comprises at least one mismatch and chemical
 PT modification.
 XX
 PS Claim 7; Page 207; 294pp; English.
 XX
 CC The present invention provides single-stranded oligonucleotides which can
 CC be used for the targeted alteration of genomic sequences, where the
 CC oligonucleotide has at least one mismatch compared with the genomic
 CC sequence to be altered. In particular, these sequences are directed at
 CC the following genes: adenosine deaminase, p53, beta-globin,
 CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
 CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
 CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
 CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
 CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
 CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and

CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
 CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
 CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
 CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
 CC various syndromes. The present sequence is one of the gene correcting
 CC oligonucleotides of the invention

XX Sequence 17 BP; 3 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

QY Query Match 0.8%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 1631 CCAGCAGGCGCGCT 1646
 1 CCAGCAGGCGCGCT 16

RESULT 712

AAC83038/C
 ID AAC83038 standard; DNA; 17 BP.

XX AAC83038;

DT 22-FEB-2001 (first entry)

DE Primer #3 used to isolate dog beta-galactosidase cDNA.

XX Portuguese Water dog; beta galactosidase; R60H; GMI-gangliosidosis;
 KW primer: ss.

XX Canis familiaris.

XX US6140115-A.

XX 31-OCT-2000.

XX 09-NOV-1999; 99US-00436605.

XX 09-NOV-1999; 99US-00436605.

XX {KOLO/} KOLODNY E H.

PA (WANG/) WANG Z.

PA (RAGH/) RAGHAVAN S.

PA (ZENG/) ZENG B.

XX Kolodny EH, Wang Z, Raghavan S, Zeng B;

PI WPI; 2001-006329/01.

XX New beta-galactosidase gene isolated from Canis familiaris, useful for
 PT screening R60H mutation of acid beta-galactosidase, or for screening
 PT Portuguese Water dogs to eliminate carriers of GMI-gangliosidosis from
 PT breeding programs.

XX Example 4; Col 10; 27pp; English.

XX The present invention relates to canine beta-galactosidase. The cDNA
 CC molecule and kit are useful for screening the R60H mutation of acid beta-
 CC galactosidase. The cDNA molecule is also useful for screening Portuguese
 CC Water dogs to eliminate carriers of GMI-gangliosidosis from breeding
 CC programs

XX Sequence 17 BP; 2 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

QY Query Match 0.8%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 41 CAGGAGGACGAGCT 56
 17 CAGGATGACGAGCT 2

RESULT 713

AAF91027/C

ID AAF91027 standard; DNA; 17 BP.

XX AAF91027;

DT 04-MAY-2001 (first entry)

XX Human multi drug resistance-1 gene related sequence SEQ ID NO: 114.
 DE Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
 XX inflammatory disease; neuronal disease; CNS disease;
 KW cardiovascular disease; PCR primer; ss.

XX Homo sapiens.

XX WO200109183-A2.

XX 08-FEB-2001.

XX 28-JUL-2000; 2000WO-EP007314.

XX 30-JUL-1999; 99EP-00114938.

PR 22-FEB-2000; 2000EP-00103361.

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;

XX WPI; 2001-159855/16.

XX New polynucleotide encoding a molecular variant Multi Drug Resistance
 PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases
 PT associated with abnormal MDR-1 expression or function, e.g. cancer.

XX Claim 36; Page 100; 154pp; English.

XX The present invention provides nucleotides encoding molecular variants of
 CC the human multi drug resistance-1 (MDR-1) protein. These can be used to
 CC identify compounds capable of treating multidrug resistance and
 CC sensitivity interfering resulting from polymorphisms in MDR-1, which can
 CC lead to difficulties in treating cancer, cardiovascular, neuronal,
 CC inflammatory and CNS diseases

XX Sequence 17 BP; 5 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

QY Query Match 0.8%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 52 GCAGTGTGACTGCTGA 67
 16 GCATGTGACTGCTGA 1

RESULT 714

ABV78818/C

ID ABV78818 standard; DNA; 17 BP.

XX ABV78818;

DT 03-JAN-2003 (first entry)

XX Human HTPL scanning oligonucleotide SEQ ID 64.

XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
 KW human testis expressed Patched like protein; testis; adrenal; liver;
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.

XX Homo sapiens.

XX

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PN  EP1229046-A2.
XX
PD  07-AUG-2002.
XX
FF  28-JAN-2002; 2002EP-00001167.
XX
PR  30-JAN-2001; 2001WO-US0000663.
PR  30-JAN-2001; 2001WO-US0000664.
PR  30-JAN-2001; 2001WO-US0000665.
PR  30-JAN-2001; 2001WO-US0000667.
PR  30-JAN-2001; 2001WO-US0000668.
PR  30-JAN-2001; 2001WO-US0000669.
PR  23-MAY-2001; 2001US-00864761.
PR  09-OCT-2001; 2001US-0327898P.
XX
FA  (ABOM-) ABOMICA INC.
XX
PT  Zhan J;
XX
DR  WPI; 2002-676582/73.
XX
PT  Novel isolated human testis expressed Patched like protein (HTPL), useful
PT  for identifying agonist and antagonist and specific binding partners, and
PT  for treating subjects having defects in HTPL.
XX
PS  Example 2; Page 72; 718pp; English.
XX
CC  The present invention relates to human testis expressed Patched like
CC  protein (HTPL), see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
CC  has two isoforms, with a few single base pair differences between the
CC  two. One of the single base pair changes introduces a premature stop
CC  codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC  shares an overall structure organisation with the Patched protein. The
CC  shared structural features strongly imply that HTPL plays a role similar
CC  to that of Patched, and is a potential tumour suppressor. HTPL is
CC  important in regulating male germ cell development, and the HTPL gene was
CC  mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC  useful for diagnosing a disorder caused by mutation in HTPL, and in
CC  therapy and manufacture of a medicament for treatment or prevention of
CC  such disorder associated with decreased expression or activity of human
CC  HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC  foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC  skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC  clinically useful diagnostic markers and potential therapeutic agents for
CC  male infertility and cancer. The present oligonucleotide was used in an
CC  example from the invention
XX
SQ  Sequence 17 BP; 0 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

    Query Match          0.8%; Score 14.4; DB 1; Length 17;
    Best Local Similarity 93.8%; Pred. NO. 7e+02;
    Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy  40 GCAGGAGGACCAGCAG 55
    |||||
Db  16 GCAGGAGGAAACAGCAG 1

RESULT 715
ABV78817/c
ID  ABV78817 standard; DNA; 17 BP.
XX
AC  ABV78817;
XX
XX
DT  03-JAN-2003 (first entry)
XX
DE  Human HTPL scanning oligonucleotide SEQ ID 63.
XX
KW  Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW  human testis expressed Patched like protein; testis; adrenal; liver;
KW  male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW  prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX

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OS  Homo sapiens.
XX
PN  EP1229046-A2.
XX
PD  07-AUG-2002.
XX
FF  28-JAN-2002; 2002EP-00001167.
XX
PR  30-JAN-2001; 2001WO-US0000663.
PR  30-JAN-2001; 2001WO-US0000664.
PR  30-JAN-2001; 2001WO-US0000665.
PR  30-JAN-2001; 2001WO-US0000667.
PR  30-JAN-2001; 2001WO-US0000668.
PR  30-JAN-2001; 2001WO-US0000669.
PR  23-MAY-2001; 2001US-00864761.
PR  09-OCT-2001; 2001US-0327898P.
XX
FA  (ABOM-) ABOMICA INC.
XX
PT  Zhan J;
XX
DR  WPI; 2002-676582/73.
XX
PT  Novel isolated human testis expressed Patched like protein (HTPL), useful
PT  for identifying agonist and antagonist and specific binding partners, and
PT  for treating subjects having defects in HTPL.
XX
PS  Example 2; Page 72; 718pp; English.
XX
CC  The present invention relates to human testis expressed Patched like
CC  protein (HTPL), see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
CC  has two isoforms, with a few single base pair differences between the
CC  two. One of the single base pair changes introduces a premature stop
CC  codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC  shares an overall structure organisation with the Patched protein. The
CC  shared structural features strongly imply that HTPL plays a role similar
CC  to that of Patched, and is a potential tumour suppressor. HTPL is
CC  important in regulating male germ cell development, and the HTPL gene was
CC  mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC  useful for diagnosing a disorder caused by mutation in HTPL, and in
CC  therapy and manufacture of a medicament for treatment or prevention of
CC  such disorder associated with decreased expression or activity of human
CC  HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC  foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC  skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC  clinically useful diagnostic markers and potential therapeutic agents for
CC  male infertility and cancer. The present oligonucleotide was used in an
CC  example from the invention
XX
SQ  Sequence 17 BP; 0 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

    Query Match          0.8%; Score 14.4; DB 1; Length 17;
    Best Local Similarity 93.8%; Pred. NO. 7e+02;
    Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy  40 GCAGGAGGACCAGCAG 55
    |||||
Db  17 GCAGGAGGAAACAGCAG 2

RESULT 716
ABK18807
ID  ABK18807 standard; RNA; 17 BP.
XX
AC  ABK18807;
XX
XX
DT  09-APR-2002 (first entry)
XX
DE  Human ERG DNazyme target sequence Seq ID No 1454.
XX
KW  Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW  ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW  vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX

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KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNaze; inozyne;
KW amberzyme.
XX Homo sapiens.
XX WO200188124-A2.
XX 22-NOV-2001.
XX 16-MAY-2001; 2001WO-US015866.
XX 16-MAY-2000; 2000US-00572021.
XX (RIBO-) RIBOZYME PHARM INC.
XX (GLAX) GLAXO GROUP LTD.
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
XX Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX Claim 4; Page 92; 149pp; English.
XX The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX treating a patient having a condition associated with the level of ERG,
XX by contacting cells of the patient with (I) under conditions suitable for
XX the treatment. The method comprises the use of one or more therapies
XX under conditions suitable for the treatment. Leukaemia or tumour
XX angiogenesis is treated by administering (I) to the patient in
XX conjunction with one or more of other therapies such as radiation or
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX cation such as Mg²⁺. (I) is useful for diagnosis of conditions and
XX diseases related to the expression of ERG, and as diagnostic tool to
XX examine genetic drift and mutations within diseased cells or to detect
XX the presence of ERG RNA in a cell. (I) is useful for specifically
XX targeting genes that share homology with ERG gene or ERG fusion genes.
XX ABK17354-ABK22719 represent nucleic acids, including antisense and
XX enzymatic nucleic acid molecules which regulate expression of ERG, and
XX related PCR primers of the invention
XX Sequence 17 BP; 6 A; 2 C; 6 G; 0 T; 3 U; 0 Other;
SQ Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7e+02;
Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 1297 AACGGAGGAGTTCAGA 1312
Db 1 AACGGGAGGUCCAAGA 16
RESULT 717
ABK17468
ID ABK17468 standard; RNA; 17 BP.
XX
AC ABK17468;
XX

DT 09-APR-2002 (first entry)
XX Human ERG hammerhead ribozyme target sequence, Seq ID No 115.
DE
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritis; antipsoriatic; virucide; osteopathic;
KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNaze; inozyne;
KW amberzyme.
XX Homo sapiens.
XX WO200188124-A2.
XX 22-NOV-2001.
XX 16-MAY-2001; 2001WO-US015866.
XX 16-MAY-2000; 2000US-00572021.
XX (RIBO-) RIBOZYME PHARM INC.
XX (GLAX) GLAXO GROUP LTD.
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
XX Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX Claim 4; Page 61; 149pp; English.
XX The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX treating a patient having a condition associated with the level of ERG,
XX by contacting cells of the patient with (I) under conditions suitable for
XX the treatment. The method comprises the use of one or more therapies
XX under conditions suitable for the treatment. Leukaemia or tumour
XX angiogenesis is treated by administering (I) to the patient in
XX conjunction with one or more of other therapies such as radiation or
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX cation such as Mg²⁺. (I) is useful for diagnosis of conditions and
XX diseases related to the expression of ERG, and as diagnostic tool to
XX examine genetic drift and mutations within diseased cells or to detect
XX the presence of ERG RNA in a cell. (I) is useful for specifically
XX targeting genes that share homology with ERG gene or ERG fusion genes.
XX ABK17354-ABK22719 represent nucleic acids, including antisense and
XX enzymatic nucleic acid molecules which regulate expression of ERG, and
XX related PCR primers of the invention
XX Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
SQ Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7e+02;
Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 704 AGGAGATCAGACTGGA 719
Db 2 AGGAGAUCAAGCCUGGA 17

RESULT 718
ABK18069
ID ABK18069 standard; RNA; 17 BP.
AC
XX ABK18069;
XX
XX
DT 09-APR-2002 (first entry)
XX
XX Human ERG hammerhead ribozyme target sequence, Seq ID No 716.
DE
XX
XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulnaray; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW
XX
OS Homo sapiens.
XX
XX WO200188124-A2.
FN
XX
XX
PD 22-NOV-2001.
XX
XX 16-MAY-2001; 2001WO-US015866.
PF
XX
XX 16-MAY-2000; 2000US-00572021.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (GLAX) GLAXO GROUP LTD.
XX
XX
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX
XX WPI; 2002-082995/11.
DR
XX
XX Novel polynucleotide which down regulates expression of Ets-related gene,
PT useful for treating cancer, diabetic retinopathy, macular degeneration,
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
XX
PS Claim 4; Page 72; 149pp; English.
XX
XX The invention relates to a nucleic acid molecule (I) which down regulates
CC expression of an Ets-related gene (ERG). (I) is useful for treating
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention
XX
SQ Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7e+02;
Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 704 AGGAGATCAGACTGGA 719
|||||:|||||:|||||
DB 1 AGGAGCAUCAGCCUGGA 16
RESULT 719
ABK19256
ID ABK19256 standard; RNA; 17 BP.
XX
AC ABK19256;
XX
XX 09-APR-2002 (first entry)
XX
XX Human ERG Amberzyme target sequence Seq ID No 1903.
DE
XX
XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulnaray; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW
XX
XX Homo sapiens.
OS
XX
XX WO200188124-A2.
FN
XX
XX
PD 22-NOV-2001.
XX
XX 16-MAY-2001; 2001WO-US015866.
PF
XX
XX 16-MAY-2000; 2000US-00572021.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (GLAX) GLAXO GROUP LTD.
XX
XX
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX
XX WPI; 2002-082995/11.
DR
XX
XX Novel polynucleotide which down regulates expression of Ets-related gene,
PT useful for treating cancer, diabetic retinopathy, macular degeneration,
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
XX
PS Claim 4; Page 124; 149pp; English.
XX
XX The invention relates to a nucleic acid molecule (I) which down regulates
CC expression of an Ets-related gene (ERG). (I) is useful for treating
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention
XX
SQ Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 17;

CC ABK17354-ABK22719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention

XX SQ Sequence 17 BP; 6 A; 4 C; 5 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7e+02; Mismatches 2; Indels 0; Gaps 0;

QY 1295 CCAACGAGGAGTTCAA 1310

||||| |||||
 Db 2 CCAACGGGGAGUCAA 17

RESULT 720

ABS75017

ID ABS75017 standard; DNA; 17 BP.

AC ABS75017;

DT 24-DEC-2002 (first entry)

DE Human PAPP-Ea associated 17-mer SEQ ID 543.

KW PAPP-E; human; pregnancy associated plasma protein E; abortive;
 KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
 KW dysgenetic pregnancy; primer; ss.

OS Homo sapiens.

US2002102252-A1.

PD 01-AUG-2002.

PF 06-APR-2001; 2001US-00827998.

PR 26-MAY-2000; 2000US-0207456P.

XX (GUYI/) GU Y.

PA (SHAN/) SHANNON M E.

PI Gu Y, Shannon ME;

XX WPI; 2002-697817/75.

PT New isolated nucleic acid encoding an isoform of human pregnancy
 PT associated plasma protein E, for preventing or aborting pregnancy.

PS Example 2; Page 146; 353pp; English.

CC This invention describes a novel isolated nucleic acid that encodes one
 CC of three new isoforms of human pregnancy associated plasma protein E,
 CC hPAPP-E. The products of the invention have abortive and contraceptive
 CC activity and can be used for gene therapy or in a vaccine. The nucleic
 CC acid, polypeptide encoded by it, or antibody to the polypeptide can be
 CC used in pharmaceutical compositions or vaccines for preventing or
 CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
 CC dysgenetic pregnancies. The nucleic acids are used as probes to assess
 CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
 CC antibodies can be used to assess the expression levels of PAPP-E isoform
 CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
 CC antenatally. This sequence represents an oligomer used in scanning the
 CC human PAPP-E genes described in the disclosure of the invention

XX SQ Sequence 17 BP; 4 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 7e+02; Mismatches 1; Indels 0; Gaps 0;

QY 287 AACTTCGTTCTGCACG 302

||||| |||||

Db 2 AACTTCGTTCTGCAAG 17

RESULT 721

ABS75019

ID ABS75019 standard; DNA; 17 BP.

AC ABS75019;

DT 24-DEC-2002 (first entry)

DE Human PAPP-Ea associated 17-mer SEQ ID 545.

KW PAPP-E; human; pregnancy associated plasma protein E; abortive;
 KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
 KW dysgenetic pregnancy; primer; ss.

OS Homo sapiens.

US2002102252-A1.

PD 01-AUG-2002.

PF 06-APR-2001; 2001US-00827998.

PR 26-MAY-2000; 2000US-0207456P.

XX (GUYI/) GU Y.

PA (SHAN/) SHANNON M E.

PI Gu Y, Shannon ME;

XX WPI; 2002-697817/75.

PT New isolated nucleic acid encoding an isoform of human pregnancy
 PT associated plasma protein E, for preventing or aborting pregnancy.

PS Example 2; Page 146; 353pp; English.

CC This invention describes a novel isolated nucleic acid that encodes one
 CC of three new isoforms of human pregnancy associated plasma protein E,
 CC hPAPP-E. The products of the invention have abortive and contraceptive
 CC activity and can be used for gene therapy or in a vaccine. The nucleic
 CC acid, polypeptide encoded by it, or antibody to the polypeptide can be
 CC used in pharmaceutical compositions or vaccines for preventing or
 CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
 CC dysgenetic pregnancies. The nucleic acids are used as probes to assess
 CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
 CC antibodies can be used to assess the expression levels of PAPP-E isoform
 CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
 CC antenatally. This sequence represents an oligomer used in scanning the
 CC human PAPP-E genes described in the disclosure of the invention

XX SQ Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 7e+02; Mismatches 1; Indels 0; Gaps 0;

QY 288 ACTTCGTTCTGCACG 303

||||| |||||
 Db 1 ACTTCGTTCTGCAAG 16

RESULT 722

ABK57239

ID ABK57239 standard; RNA; 17 BP.

AC ABK57239;

DT 02-JUL-2002 (first entry)

XX Human CLCA1 gene enzymatic nucleic acid #1610.

XX Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
 KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
 KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
 KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
 KW acetylcysteine.
 XX Homo sapiens.
 OS
 XX WO200211674-A2.
 PN
 XX 14-FEB-2002.
 PD
 XX 09-AUG-2001; 2001WO-US024970.
 PF
 XX 09-AUG-2000; 2000US-0224383P.
 PR
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (SYNT) SYNTEX USA LLC.
 PA (THOM/) THOMPSON J.
 XX Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
 PI Grupe A;
 PI
 XX WPI; 2002-217145/27.
 DR
 XX Enzymatic polynucleotide that down regulates expression of chloride
 PT channel calcium activated gene, useful for treating Chronic obstructive
 PT pulmonary disease (COPD), chronic bronchitis and asthma.
 XX Claim 4; Page 100; 152pp; English.
 PS The invention relates to enzymatic nucleic acid molecules that down
 XX regulate expression of chloride channel calcium activated 1 (CLCA1) genes
 CC by cleaving RNA derived from the genes. The nucleic acid sequences are
 CC useful as pharmaceutical agents for treating conditions such as chronic
 CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
 CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
 CC that are related to or will respond to the levels of CLCA1 in a cell or
 CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
 CC hence, are useful for treatment of a patient having a condition
 CC associated with the level of CLCA1, where the invention further comprises
 CC the use of one or more therapies under conditions suitable for the
 CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
 CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
 CC nucleic acids of the invention are also used as diagnostic tools to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of CLCA1 RNA in a cell. This sequence represents an
 CC enzymatic nucleic acid molecule of the invention
 XX
 SQ Sequence 17 BP; 5 A; 4 C; 4 G; 0 T; 4 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 75.0%; Pred. NO. 7e+02;
 Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 146 AACGCAGCTGTCAT 161
 ||| |||||:|:|:|:
 DB 2 AACUGCAGCUGUCAAU 17
 RESULT 723
 ABK57624
 ID ABK57624 standard; RNA; 17 BP.
 XX
 AC ABK57624;
 XX
 DT 02-JUL-2002 (first entry)
 XX Human CLCA1 gene enzymatic nucleic acid #1995.
 DE Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
 XX antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
 KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
 KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;

KW Chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
 KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
 KW acetylcysteine.
 XX Homo sapiens.
 OS
 XX WO200211674-A2.
 PN
 XX 14-FEB-2002.
 PD
 XX 09-AUG-2001; 2001WO-US024970.
 PF
 XX 09-AUG-2000; 2000US-0224383P.
 PR
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (SYNT) SYNTEX USA LLC.
 PA (THOM/) THOMPSON J.
 XX Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
 PI Grupe A;
 PI
 XX WPI; 2002-217145/27.
 DR
 XX Enzymatic polynucleotide that down regulates expression of chloride
 PT channel calcium activated gene, useful for treating Chronic obstructive
 PT pulmonary disease (COPD), chronic bronchitis and asthma.
 XX Claim 4; Page 131; 152pp; English.
 PS The invention relates to enzymatic nucleic acid molecules that down
 XX regulate expression of chloride channel calcium activated 1 (CLCA1) genes
 CC by cleaving RNA derived from the genes. The nucleic acid sequences are
 CC useful as pharmaceutical agents for treating conditions such as chronic
 CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
 CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
 CC that are related to or will respond to the levels of CLCA1 in a cell or
 CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
 CC hence, are useful for treatment of a patient having a condition
 CC associated with the level of CLCA1, where the invention further comprises
 CC the use of one or more therapies under conditions suitable for the
 CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
 CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
 CC nucleic acids of the invention are also used as diagnostic tools to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of CLCA1 RNA in a cell. This sequence represents an
 CC enzymatic nucleic acid molecule of the invention
 XX
 SQ Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 75.0%; Pred. NO. 7e+02;
 Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 1573 TCAGCGCAGCCAGCTT 1588
 :|| |||||:|:|:|:
 DB 2 UCAAGCAGCCAGCUU 17
 RESULT 724
 ABK56596
 ID ABK56596 standard; RNA; 17 BP.
 XX
 AC ABK56596;
 XX
 DT 02-JUL-2002 (first entry)
 XX Human CLCA1 gene enzymatic nucleic acid #967.
 DE Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
 KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
 KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
 KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
 KW acetylcysteine.

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XX OS Homo sapiens.
XX PD WO200211674-A2.
XX PF 14-FEB-2002.
XX PD XX
XX PF 09-AUG-2001; 2001WO-US024970.
XX PR 09-AUG-2000; 2000US-0224383P.
XX PR 09-AUG-2000; 2000US-0224383P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (SYNT ) SYNTAX USA LLC.
XX PA (THOM/) THOMPSON J.
XX PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
XX PI Grupe A;
XX DR WPI; 2002-217145/27.
XX PT Enzymatic polynucleotide that down regulates expression of chloride
XX PT channel calcium activated gene, useful for treating Chronic obstructive
XX PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX PS Claim 4; Page 75; 152pp; English.
XX CC The invention relates to enzymatic nucleic acid molecules that down
XX CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
XX CC by cleaving RNA derived from the genes. The nucleic acid sequences are
XX CC useful as pharmaceutical agents for treating conditions such as chronic
XX CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
XX CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
XX CC that are related to or will respond to the levels of CLCA1 in a cell or
XX CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
XX CC hence, are useful for treatment of a patient having a condition
XX CC associated with the level of CLCA1, where the invention further comprises
XX CC the use of one or more therapies under conditions suitable for the
XX CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
XX CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
XX CC examine genetic drift and mutations within diseased cells or to detect
XX CC the presence of CLCA1 RNA in a cell. This sequence represents an
XX CC enzymatic nucleic acid molecule of the invention
XX SQ Sequence 17 BP; 8 A; 6 C; 2 G; 0 T; 1 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 7e+02;
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 672 AAGCAGCTCACAGAC 687
DB 1 AAGCAGCUCACAAAC 16

RESULT 725
ABK57560
ID ABK57560 standard; RNA; 17 BP.
AC ABK57560;
XX 02-JUL-2002 (first entry)
XX DE Human CLCA1 gene enzymatic nucleic acid #1931.
XX KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
XX KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
XX KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
XX KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
XX KW acetylcysteine.
XX OS Homo sapiens.

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PN WO200211674-A2.
XX 14-FEB-2002.
XX PF 09-AUG-2001; 2001WO-US024970.
XX PR 09-AUG-2000; 2000US-0224383P.
XX PR (RIBO-) RIBOZYME PHARM INC.
XX PA (SYNT ) SYNTAX USA LLC.
XX PA (THOM/) THOMPSON J.
XX PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
XX PI Grupe A;
XX DR WPI; 2002-217145/27.
XX PT Enzymatic polynucleotide that down regulates expression of chloride
XX PT channel calcium activated gene, useful for treating Chronic obstructive
XX PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX PS Claim 4; Page 129; 152pp; English.
XX CC The invention relates to enzymatic nucleic acid molecules that down
XX CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
XX CC by cleaving RNA derived from the genes. The nucleic acid sequences are
XX CC useful as pharmaceutical agents for treating conditions such as chronic
XX CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
XX CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
XX CC that are related to or will respond to the levels of CLCA1 in a cell or
XX CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
XX CC hence, are useful for treatment of a patient having a condition
XX CC associated with the level of CLCA1, where the invention further comprises
XX CC the use of one or more therapies under conditions suitable for the
XX CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
XX CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
XX CC nucleic acids of the invention are also used as diagnostic tools to
XX CC examine genetic drift and mutations within diseased cells or to detect
XX CC the presence of CLCA1 RNA in a cell. This sequence represents an
XX CC enzymatic nucleic acid molecule of the invention
XX SQ Sequence 17 BP; 8 A; 4 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7e+02;
Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 604 AAACUGAGACCTTACA 619
DB 1 AAACUGAGACCTTACA 16

RESULT 726
ACN10394
ID ACN10394 standard; RNA; 17 BP.
AC ACN10394;
XX 22-APR-2004 (first entry)
XX DE WNV minus strand Inozyme substrate SEQ ID NO 10397.
XX KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX KW encephalitis; myocarditis; meningitis; infection; hepatitis;
XX KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX KW Amberzyme; Zinzyme; ss.
XX OS West Nile Virus.
XX OS WO200268637-A2.
XX PN 06-SEP-2002.

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XX PF 19-OCT-2001; 2001WO-US048350.
XX PR 20-OCT-2000; 2000US-0242411P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J A.
XX PI Blatt L, Mcswiggen JA;
XX XX
XX DR WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 10397; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 6 A; 9 C; 1 G; 0 T; 1 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 430 AACCATCCCCCAGCA 445
Db 1 AACCAACCCCGCAGCA 16

RESULT 727
ACN14092/c
ID ACN14092 standard; RNA; 17 BP.
XX
XX ACN14092;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand DNazyme substrate SEQ ID NO 14095.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
```

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PA (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 14095; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 4 A; 5 C; 2 G; 0 T; 6 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 877 GATGACTGTGGAGCA 892
Db 17 GATGACTGTGGAGCA 2

RESULT 728
ACN04335/c
ID ACN04335 standard; RNA; 17 BP.
XX
XX ACN04335;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV Zinzyme substrate SEQ ID NO 4338.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX
XX (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
```

PT (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

PS Claim 23; SEQ ID NO 4338; 495pp; English.

XX

CC The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention

XX

SQ Sequence 17 BP; 0 A; 1 C; 10 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 7e+02; 1; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 429 CAACATCCCCCAGC 444
||||| |||||||
DB 16 CAACCAACCCACGC 1

RESULT 729
ACN06743/C
ID ACN06743 standard; RNA; 17 BP.
XX
AC ACN06743;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV Amberzyme substrate SEQ ID NO 6746.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme; Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
XX 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PI Blatt L, Mcswiggen JA;
XX WPI; 2002-706994/76.
DR
XX New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

PS Claim 23; SEQ ID NO 6746; 495pp; English.

XX

CC The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for

CC treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention

XX

SQ Sequence 17 BP; 1 A; 1 C; 9 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 7e+02; 1; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 430 AACCATCCCCCAGCA 445
||||| |||||||
DB 17 AACCAACCCACGCA 2

RESULT 730
ACN03647
ID ACN03647 standard; RNA; 17 BP.
XX
AC ACN03647;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV Zinzyme substrate SEQ ID NO 3650.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme; Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
XX 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PI Blatt L, Mcswiggen JA;
XX WPI; 2002-706994/76.
DR
XX New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

PS Claim 23; SEQ ID NO 3650; 495pp; English.

XX

CC The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at

CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention

XX
SQ Sequence 17 BP; 5 A; 2 C; 5 G; 0 T; 5 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 7e+02; 1; Indels 0; Gaps 0;
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
Qy 877 GATGACTGTGGGAACA 892
||:||||:|||||
Db 2 GAUGACUGUGGAACA 17

RESULT 731
ABT34610
ID ABT34610 standard; DNA; 17 BP.
XX
AC ABT34610;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 247.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
EN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.

XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.

XX Disclosure; Page 63; 720pp; French.

XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX given in the specification, a sequence containing at least 15 consecutive
XX nucleotides from the 17 mer sequence, a sequence with, after optimal
XX alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX hybridizes to them under highly stringent conditions, or the complement
XX of any of them, or the corresponding RNA. The novel isolated nucleic
XX acids of the invention are useful as probes and primers for detecting,
XX identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX component of a gene chip, in vitro (anti)sense reagents, and for
XX production of recombinant polypeptides. Any of the nucleic acids,
XX polypeptides, vectors containing the nucleic acids, cells containing the
XX vector or antibodies directed against the polypeptides are useful for
XX preparation of pharmaceuticals for prevention and/or treatment of viral
XX diseases that are characterised by development of tumours or cell
XX degeneration, specifically cancer but also Alzheimer's disease and
XX schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX patient samples is useful for diagnosis and/or prognosis of these
XX diseases. The polypeptides can also be used to generate antibodies, and
XX both the polypeptide and antibodies are useful as components of protein

CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention

XX
SQ Sequence 17 BP; 5 A; 2 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 7e+02; 1; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1174 ATCTTCTATGAGATGG 1189
|||||||:
Db 2 ATCTTCTATGAATGG 17

RESULT 732
ABZ64792
ID ABZ64792 standard; RNA; 17 BP.
XX
AC ABZ64792;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human HER2 DNAzyme substrate #249.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.

XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.

XX 29-MAY-2002; 2002WO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
XX
PR 06-JUN-2001; 2001US-0296249P.
XX
PR 10-SEP-2001; 2001US-0318471P.

XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
XX WPI; 2003-140484/13.

XX Novel short interfering RNA and enzymatic nucleic acid useful for
XX treating cancer, modulates the expression of a nucleic acid encoding
XX HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS Claim 4; Page 137; 185pp; English.

XX The invention relates to a novel short interfering RNA (siRNA) nucleic
XX acid molecule or an enzymatic nucleic acid molecule, that modulates
XX expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX rheumatic activity. The nucleic acid molecules are useful for reducing
XX HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX also useful for treating breast, ovarian, colorectal, lung, prostate,
XX bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ65520 - ABZ66524,
XX ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX ribozymes of the invention

XX Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 7e+02;
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 49 CCAGCAGTGTGACTGC 64

DB		: : : :	
	1	CCAGCUGGACUGC	16
RESULT 733			
ID	ABZ60189/c		
AC	ABZ60189 standard; RNA; 17 BP.		
XX	ABZ60189;		
XX			
DT	21-MAR-2003 (first entry)		
XX			
DE	Human K-Ras DNzyme substrate #301.		
XX			
KW	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;		
KW	enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;		
KW	anti-rheumatic; cancer; AIDS; ss.		
XX			
OS	Homo sapiens.		
XX			
PN	WO200297114-A2.		
XX			
PD	05-DEC-2002.		
XX			
PF	29-MAY-2002; 2002WO-US016840.		
XX			
PR	29-MAY-2001; 2001US-0294140P.		
PR	06-JUN-2001; 2001US-0296249P.		
PR	10-SEP-2001; 2001US-0318471P.		
XX			
PA	(RIBO-) RIBOZYME PHARM INC.		
XX			
PI	Mcswiggen J;		
XX			
DR	WPI; 2003-140484/13.		
XX			
PT	Novel short interfering RNA and enzymatic nucleic acid useful for		
PT	treating cancer, modulates the expression of a nucleic acid encoding		
PT	HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.		
XX			
FS	Claim 58; Page 90; 185pp; English.		
XX			
CC	The invention relates to a novel short interfering RNA (siRNA) nucleic		
CC	acid molecule or an enzymatic nucleic acid molecule, that modulates		
CC	expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,		
CC	human immunodeficiency virus (HIV) or a component of HIV. The nucleic		
CC	acid molecule of the invention has cytosstatic, anti-HIV, and anti-		
CC	rheumatic activity. The nucleic acid molecules are useful for reducing		
CC	HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are		
CC	also useful for treating breast, ovarian, colorectal, lung, prostate,		
CC	bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences		
CC	shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,		
CC	ABZ66530 - ABZ66585 represent substrate/target sequences for the human		
XX	ribozymes of the invention		
SQ	Sequence 17 BP; 2 A; 8 C; 2 G; 0 T; 5 U; 0 Other;		
Query Match	0.8%; Score 14.4; DB 1; Length 17;		
Best Local Similarity	93.8%; Pred. No. 7e+02;		
Matches	15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;		
QY	361 GGGGAGAGTGACCAGG 376		
DB	17 GGGGAGAGTGACCATG 2		
RESULT 734			
ACCT74114			
ID	ACC74114 standard; DNA; 17 BP.		
XX	AC		
XX	ACC74114;		
XX			
DT	11-JUL-2003 (first entry)		
XX			
DE	Human CYP2D6 targeting oligo SEQ ID NO: 183.		
XX			
KW	Human; cultured cell; coisogenic; genotypically distinct; target locus;		
KW	ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.		
XX			
OS	Homo sapiens.		
XX			
PN	WO2003027264-A2.		
XX			
PD	03-APR-2003.		
XX			
DE	Human CYP2D6 targeting oligo SEQ ID NO: 184.		
XX			
KW	Human; cultured cell; coisogenic; genotypically distinct; target locus;		
KW	ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.		
XX			
OS	Homo sapiens.		
XX			
PN	WO2003027264-A2.		
XX			
PD	03-APR-2003.		
XX			
DE	Human CYP2D6 targeting oligo SEQ ID NO: 184.		
XX			
KW	Human; cultured cell; coisogenic; genotypically distinct; target locus;		
KW	ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.		
XX			
OS	Homo sapiens.		
XX			
PN	WO2003027264-A2.		
XX			
PD	03-APR-2003.		
XX			
DE	Human CYP2D6 targeting oligo SEQ ID NO: 184.		
XX			
KW	Human; cultured cell; coisogenic; genotypically distinct; target locus;		
KW	ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.		
XX			
OS	Homo sapiens.		
XX			
PN	WO2003027264-A2.		
XX			
PD	03-APR-2003.		
XX			
DE	Human CYP2D6 targeting oligo SEQ ID NO: 184.		
XX			
KW	Human; cultured cell; coisogenic; genotypically distinct; target locus;		
KW	ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.		
XX			
OS	Homo sapiens.		
XX			
PN	WO2003027264-A2.		
XX			
PD	03-APR-2003.		
XX			
DE	Human CYP2D6 targeting oligo SEQ ID NO: 184.		
XX			
KW	Human; cultured cell; coisogenic; genotypically distinct; target locus;		
KW	ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.		
XX			
OS	Homo sapiens.		


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XX PF 27-SEP-2002; 2002WO-US031180.
XX PR 27-SEP-2001; 2001US-0325992P.
XX PA (UYDE ) UNIV DELAWARE.
XX PI Kmiec EB, Rice MC;
XX DR WPI; 2003-371919/35.
XX PT Novel cultured cell collection comprising at least 5 genotypically
PT distinct cells each of which is coisogenic with respect to other cells at
PT target locus common among them, useful for identifying target locus
PT genotypes.
XX PS Example 2; Page 102; 112pp; English.
XX CC The invention relates to a novel collection of cultured cells, comprising
CC at least 5 genotypically distinct cells, where each of the at least 5
CC genotypically distinct cells is coisogenic with respect to the others of
CC the at least 5 genotypically distinct cells at a target locus common
CC among them, and where each of the at least 5 genotypically distinct cells
CC can be separately assayed. The collection of cells is useful for
CC identifying genotypes of a target locus that alter a cellular phenotype.
CC The collection is also useful for pharmacogenomic studies, and in studies
CC of structure-activity relationships of existing, and of potential new,
CC therapeutic agents permitting multiplex analysis of the effects of amino
CC acid changes on ligand-receptor interactions. The sequences shown in
CC ACC79391-ACC7994 represent human ABCB1 (MDR1) targeting oligos. The
CC sequences shown in ACC73975-ACC74126 represent human CYP2D6 targeting
CC oligos
XX SQ Sequence 17 BP; 3 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. NO. 7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 745 GCCATCCGGGAAGTCT 760
DB 16 GGCATCCGGGAAGTCT 1

RESULT 736
ADL47940/c
ID ADL47940 standard; RNA; 17 BP.
XX AC ADL47940;
XX DT 20-MAY-2004 (first entry)
XX DE Human IKK-gamma substrate sequence #450.
XX KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
KW substrate; ds.
XX OS Unidentified.
XX PN WO200281628-A2.
XX PD 17-OCT-2002.
XX PF 03-APR-2002; 2002WO-US010512.
XX

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PR 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
PR 28-AUG-2001; 2001US-0315315P.
XX (RIBO-) RIBOZYME PHARM INC.
XX PI Blatt L, Chowrira B, Haeberli P, Mcswiggen J, Fosnaugh K;
XX DR WPI; 2003-059513/05.
XX PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX PS Claim 59; SEQ ID NO 1473; 317pp; English.
XX CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human IKK-
CC gamma substrate sequence.
XX SQ Sequence 17 BP; 4 A; 4 C; 8 G; 0 T; 1 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. NO. 7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 922 CTGTCCAGTCTCTCC 937
DB 16 CTGCTCCAGTCTCTCC 1

RESULT 737
ADH70706/c
ID ADH70706 standard; DNA; 17 BP.
XX AC ADH70706;
XX DT 25-MAR-2004 (first entry)
XX DE Human Vbeta gene repeat sequence #496.
XX KW human; T-cell associated disease; Vbeta; autoimmune disease;
KW degenerative nervous system disease; graft versus host disease;
KW hypersensitivity disease; infectious disease; neoplastic disease;
KW Addison's disease; atrophic gastritis;
KW degenerative nervous system disease; multiple sclerosis;
KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KW allergy; type II hypersensitivity; Goodpasture's syndrome;
KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
KW breast cancer; ds.
XX OS Homo sapiens.
XX PN US2002150891-A1.
XX PD 17-OCT-2002.
XX

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PF 05-MAR-1999; 99US-00263959.
XX
XX 19-SEP-1994; 94US-00309335.
PR 19-SEP-1995; 95US-00531241.
XX
XX (HOOD/) HOOD L E.
PA (ROWE/) ROWEN L.
XX
XX Hood LE, Rowen L;
XX
XX WPI; 2004-059052/06.
XX
XX Kit for diagnosing and treating T-cell associated diseases e.g.
XX autoimmune, degenerative nervous system and infectious disease, comprises
XX nucleic acid primers specifically priming and allowing amplification of a
XX Vbeta gene.
XX
XX Disclosure; SEQ ID NO 900; 164pp; English.
XX
XX The invention relates to a kit for diagnosing and treating T-cell
XX associated diseases which comprises a panel of nucleic acid primers
XX specifically priming and allowing amplification of each Vbeta gene,
XX VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
XX rejection and diagnosing and treating T-cell associated diseases
XX including autoimmune diseases, degenerative nervous system diseases,
XX graft versus host disease, hypersensitivity diseases, infectious diseases
XX and neoplastic diseases. Autoimmune diseases include Addison's disease,
XX atrophic gastritis, degenerative nervous system diseases include multiple
XX sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
XX I hypersensitivities such as contact with allergens that lead to
XX allergies, Type II hypersensitivities such as those present in
XX Goodpasture's syndrome and Type IV hypersensitivities such as those
XX manifested in leprosy. Infectious diseases include viral infections
XX caused by viruses such as HIV, fungal infections such as those caused by
XX the yeast genus Candida, parasitic infections such as those caused by
XX schistosomes, filaria and bacterial infections such as those caused by
XX Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
XX such as leukaemias, lymphomas and cancers such as cancer of the brain,
XX breast. The present sequence represents a Vbeta gene repeat sequence.
XX
XX Sequence 17 BP; 6 A; 11 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCGG 245
Db 17 GTGGTGGTGGTGGTG 2

RESULT 738
AAV05962/c
ID AAV05962 standard; DNA; 18 BP.
XX
XX AAV05962;
AC
XX
XX 05-JUN-1998 (first entry)
DT
XX
XX Oligonucleotide for genetic fingerprinting.
DE
XX
XX Biotinylated-oligonucleotide; genetic fingerprinting; hybridisation;
KW molecular biology; forensic medicine; criminology; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /*note= "biotinylated"
FT repeat_unit 2..3
FT /*tag= b
FT /*note= "repeated 2-8 times"
FT

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```

FT modified_base 3
FT /*tag= c
FT /*note= "biotinylated"
XX
XX RU2081919-Cl.
XX
XX 20-JUN-1997.
XX
XX 17-MAR-1992; 92SU-05056570.
XX
XX 17-MAR-1992; 92SU-05056570.
XX
XX (VEKT=) VEKTOR RES PRODN ASSOC.
XX
XX Korokhov NP, Karpyshev NN, Oreshkova SP;
XX
XX WPI; 1998-085156/08.
XX
XX Collection for genome finger-printing - by using specified sequence as
XX the oligo:nucleic probe.
XX
XX Claim 1; Col 7; 5pp; Russian.
XX
XX This sequence represents a biotinylated-oligonucleotide containing a
XX simple repeat sequence (CAC) which can be used for genetic fingerprinting
XX by blot-hybridisation of a DNA specimen. The oligonucleotide is useful in
XX molecular biology, forensic medicine, criminology, e.g. for establishing
XX blood relationship in family analysis
XX
XX Sequence 18 BP; 5 A; 12 C; 0 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 7.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCGG 245
Db 18 GTGGTGGTGGTGGTG 3

RESULT 739
AAZ41020/c
ID AAZ41020 standard; DNA; 18 BP.
XX
XX AAZ41020;
AC
XX
XX 26-JAN-2000 (first entry)
DT
XX
XX Cellular inhibitor of apoptosis-2 phosphorothioate antisense oligo #12.
DE
XX
XX Identification; genetic target; gene modulation; human; probe;
KW antisense oligonucleotide; phosphorothioate; PCR primer;
KW nucleotide sequence-based technology; antisense drug discovery;
KW target validation; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX WO953101-A1.
FN
XX
XX 21-OCT-1999.
PD
XX
XX 13-APR-1999; 99WO-US008268.
PF
XX 13-APR-1998; 98US-0081483P.
PR 28-APR-1998; 98US-00067638.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cowser LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;
XX Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
XX
XX WPI; 1999-620446/53.
XX

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XX Identifying compounds which modulate expression of nucleic acids, used to
 PT provide compounds having defined physical, chemical or bioactive
 PT properties, e.g. antisense activity.
 PS Example 21; Page 100; 264pp; English.
 XX
 CC A method has been developed of defining a set of compounds that modulate
 CC the expression of a target nucleic acid (tNA) sequence via binding of the
 CC compounds with the tNA sequence. The method comprises generating a
 CC library of virtual compounds in silico according to defined criteria, and
 CC evaluating in silico the binding of the virtual compounds with the tNA
 CC according to defined criteria. Also described are: (1) a method of
 CC defining a set of oligonucleotides (ONS) that modulate the expression of
 CC a tNA sequence via binding of the ONS with the tNA sequence comprising
 CC generating a library of virtual compounds in silico according to defined
 CC criteria, and evaluating in silico the binding of the virtual ONS with
 CC the tNA according to defined criteria; and (2) a method of defining a set
 CC of compounds that modulate the expression of a tNA sequence via binding
 CC of the compounds with the tNA. The methods can be used for the generation
 CC and identification of synthetic compounds having defined physical,
 CC chemical or bioactive properties. Information gathered from assays of
 CC such compounds is used to identify nucleic acid sequences that are
 CC tractable to a variety of nucleotide sequence-based technologies, e.g.
 CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
 CC AAY52701 to AAY52706, represent sequences used in the exemplification of
 CC the present invention

SQ Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 7.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 513 CCTGGAGAGCTGACC 528
 |||||
 Db 16 CCTGGAGAGTTGACC 1

RESULT 740
 AAZ22114/c
 ID AAZ22114 standard; DNA; 18 BP.

AC AAZ22114;

XX 26-NOV-1999 (first entry)

DE Human c-IAP-2 mRNA inhibiting antisense oligo ISIS #23423.

KW Cellular Inhibitor of Apoptosis-2; antisense; diagnostic; therapeutic;
 KW c-IAP-2; prophylaxis; infection; inflammation; tumor formation; ss.

XX Synthetic.

OS Homo sapiens.

XX US5958771-A.

FD 28-SEP-1999.

PF 03-DEC-1998; 98US-00205144.

PR 03-DEC-1998; 98US-00205144.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Cowseert LM, Ackermann EJ;

DR WPI; 1999-561046/47.

XX Antisense compounds complementary to Cellular Inhibitor of Apoptosis-2
 PT useful for e.g. diagnostics, therapeutics, and as research reagents.

PS Claim 3; Col 39; 33pp; English.

XX The invention provides antisense compounds of 8-30 nucleotides that
 CC inhibit the expression of human Cellular Inhibitor of Apoptosis-2 (c-IAP-
 CC 2). The antisense compounds may be used for diagnostics, therapeutics
 CC (for modulating the expression of c-IAP-2), prophylaxis (e.g. to prevent
 CC or delay infection, inflammation, or tumor formation), as research
 CC reagents (e.g. to distinguish between members of a biological pathway)
 CC and in kits. Sequences AAZ22103-142 represent phosphorothioate
 CC oligonucleotides used for antisense inhibition of cellular inhibitor of
 CC apoptosis-2

SQ Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 7.4e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 513 CCTGGAGAGCTGACC 528

|||||

Db 16 CCTGGAGAGTTGACC 1

RESULT 741

AAZ70710/c

ID AAZ70710 standard; DNA; 18 BP.

XX AAZ70710;

XX 10-SEP-2001 (first entry)

DE Human biallelic marker upstream amplification primer SEQ ID NO:5066.

XX Human genome; biallelic marker; high density disequilibrium map;

KW genomic map; haplotype; phenotype; polymorphic base; genotyping;

KW haplotyping; hybridisation; identification; characterisation;

KW amplification; single nucleotide polymorphism; SNP; PCR primer;

XX diagnosis; ss.

XX Homo sapiens.

XX WO9954500-A2.

XX 28-OCT-1999.

XX 21-APR-1999; 99WO-1B000822.

PR 21-APR-1998; 98US-0082614P.

PR 23-NOV-1998; 98US-0109732P.

XX (GEST) GENSET.

XX Cohen D, Blumenfeld M, Chumakov I;

XX WPI; 2000-013267/01.

XX Novel biallelic markers used to construct a high density disequilibrium
 PT map of the human genome.

XX Claim 8; Page 1311; 2745pp; English.

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
 CC invention, which contain a polymorphic base at position 24 of their
 CC nucleotide sequences. AAZ69573 to AAZ77440 represent amplification
 CC primers for the biallelic markers. The biallelic markers of the invention
 CC have a variety of uses: they can be used for high density mapping of the
 CC human genome, and in complex association studies and haplotyping studies
 CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and

CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention

SQ Sequence 18 BP; 5 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 7.4e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 871 TACCTGGATGACTGTG 886

DB 17 TACCTGGATGACTGTG 2

RESULT 742

AAD20371 ID AAD20371 standard; DNA; 18 BP.

XX AC AAD20371;

XX 03-JAN-2002 (first entry)

DE Antisense oligo, ISIS# 29895, targetted to human SRC-1 DNA.

XX Human; antisense; steroid receptor coactivator-1; SRC-1; F-SRC-1; NcoA-1;
KW diagnostic; therapeutic; prophylaxis; infection; inflammation;
KW cytostatic; tumour formation; antiinflammatory; antibacterial;
KW phosphorothioate; ss.

XX Homo sapiens.
OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone"

FT modified_base 1..4

FT /*tag= b

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl residues"

FT modified_base 2

FT /*tag= c

FT /mod_base= m5c

FT modified_base 3

FT /*tag= d

FT /mod_base= m5c

FT modified_base 7

FT /*tag= e

FT /mod_base= m5c

FT modified_base 13

FT /*tag= f

FT /mod_base= m5c

FT modified_base 15..18

FT /*tag= h

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl residues"

FT modified_base 15

FT /*tag= g

FT /mod_base= m5c

XX US6294382-B1.

XX 25-SEP-2001.

XX 27-NOV-2000; 2000US-00723534.

XX 27-NOV-2000; 2000US-00723534.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Cowsert LM;

XX

DR WPI; 2001-638016/73.

XX New antisense oligonucleotides for inhibiting the expression of human
PT steroid receptor coactivator-1, particularly useful for preventing,
XX delaying or treating infection, inflammation or tumor formation.

PS Claim 3; Col 43; 36pp; English.

XX The present invention relates to an antisense compound of up to 30
CC nucleobases in length, which specifically hybridises with and inhibits
CC the expression of human steroid receptor coactivator-1 (SRC-1) (also
CC known as F-SRC-1 and NcoA-1) gene. The antisense compounds are useful for
CC diagnostics, therapeutics, prophylaxis, or as research reagents or kits.

CC The antisense oligonucleotides are useful for treating an animal,
CC particularly a human, suspected of having or being prone to a disease or
CC condition associated with the expression of SRC-1. In particular, the
CC antisense oligonucleotides are useful for preventing, delaying or
CC treating infection, inflammation or tumour formation. The present
CC sequence is an antisense oligonucleotide, ISIS# 29895, targetted to human
CC SRC-1 DNA

XX Sequence 18 BP; 6 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 7.4e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 152 AGCTGTCAATGACACT 167

DB 1 AGCTGTCAATGACACT 16

RESULT 743

ABQ65383/c

ID ABQ65383 standard; DNA; 18 BP.

XX AC ABQ65383;

XX 20-AUG-2002 (first entry)

XX Human gene methylation status determination method PCR primer #123.
DE Toxicological diagnosis; DNA methylation; methylation status;
KW toxic response; human; PCR; primer; ss.

XX Homo sapiens.

XX WO200240710-A2.

XX 23-MAY-2002.

XX 08-NOV-2001; 2001WO-EF012951.

XX 14-NOV-2000; 2000DE-01056802.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2002-463571/49.

XX Toxicological diagnosis, useful for diagnosis and prognosis of adverse
PT reactions, based on effect of test compounds on methylation status of
PT selected genes, involves determining changes in DNA methylation status.
XX Example 2; Page 104; 113pp; German.

XX The present invention relates to a method of toxicological diagnosis,
CC involving taking a DNA-containing sample from an organism or cell culture
CC that has been treated with a test compound and determining any changes in
CC the DNA methylation status or pattern caused by said test compound. The
CC method is used for diagnosis and prognosis of adverse toxic responses in
CC individuals. The present sequence is a PCR primer used to demonstrate the

```
CC method of the invention
XX
SQ Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;

Query Match      0.8%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 7.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 774 CCTCAACACGCGCAAC 789
Db 16 CCTCAACACCCCAAC 1

RESULT 744
ABK34171/c
ID ABK34171 standard; DNA; 18 BP.
AC ABK34171;
XX
XX 18-JUN-2002 (first entry)
XX
XX Human UNG PCR primer #1.
DE Human UNG PCR primer #1.
XX
XX Human; ss; astrocytoma; cytostatic; staging; cysteine methylation; CpG;
XX bisulphite; brain tissue; MALDI; ESI; electron spray mass spectrometry;
XX matrix assisted laser desorption/ionization mass spectrometry; primer.
XX
XX Homo sapiens.
OS Homo sapiens.
XX
XX WO200202808-A2.
FN WO200202808-A2.
XX
XX 10-JAN-2002.
PD 10-JAN-2002.
XX
XX 02-JUL-2001; 2001WO-EP007538.
PF 02-JUL-2001; 2001WO-EP007538.
XX
XX 30-JUN-2000; 2000DE-01032529.
PR 30-JUN-2000; 2000DE-01032529.
XX
XX 01-SEP-2000; 2000DE-01043826.
PR 01-SEP-2000; 2000DE-01043826.
XX
XX (EPITG-) EPIGENOMICS AG.
PA (EPITG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2002-171649/22.
DR WPI; 2002-171649/22.
XX
XX Novel chemically modified genomic DNA sequences, useful in the
XX characterization, classification, differentiation, grading, staging,
XX treatment and/or diagnosis of astrocytomas or predisposition to
XX astrocytomas.
XX
XX Example; Page 26; 37pp; English.
PS Example; Page 26; 37pp; English.
XX
XX The invention relates to a nucleic acid comprising a sequence (I) of at
XX least 18 bases in length of a segment of chemically pre-treated genomic
XX DNA which has any one of the sequences of (ABK33919-ABK34032) or its
XX complement. Also included are an oligonucleotide or peptide nucleic acid
XX (or set thereof) of at least 9 nucleotides which hybridises to (I).
XX
XX primers for (I), probes for detecting cytosine methylation or single-
XX nucleotide polymorphisms (SNP) in (I), an array of oligomers or peptide
XX nucleic acids for analysing diseases associated with the methylation
XX states of the CpG dinucleotides of (I). The array is useful for
XX determining genetic and/or epigenetic parameters, classification,
XX differentiation, grading, staging, treatment and/or diagnosis of
XX astrocytomas, or the predisposition to astrocytomas by analysing cytosine
XX methylations, involves obtaining a biological sample containing genomic
XX DNA, extracting the genomic DNA, converting cytosine bases which are
XX unmethylated at the 5-position, in the genomic DNA sample, to uracil or
XX another base which is dissimilar to cytosine in terms of hybridisation
XX behaviour, by chemical treatment and amplifying chemically pre-treated
XX genomic DNA fragments using the array and a polymerase, where the
XX amplificates carry a detectable label. The method further involves
XX identifying methylation status of one or more cytosine positions, and
XX analysing methylation status of the cytosine positions by reference to
XX one or more data sets. The genomic DNA is chemically treated by using a
```

CC comprising at least two (III) and their use for detecting the cytosine
 CC methylation state and/or single nucleotide polymorphisms (SNPs) in (II),
 CC and manufacturing (M1) an arrangement of different oligomers (array)
 CC fixed to a carrier material for analysing diseases associated with the
 CC methylation state of the CpG dinucleotide of (SI), where at least one
 CC oligomer is coupled to solid phase. The set of oligomers (IV) are useful
 CC as primer oligonucleotides for the amplification of (II) especially for
 CC characterising classifying and differentiating oligodendroglioma,
 CC astrocytoma and oligoastrocytoma tumours (by ascertaining genetic and/or
 CC epigenetic parameters of genomic DNA by analysing cytosine methylation
 CC and single nucleotide polymorphisms). The present sequence is a PCR
 CC primer used to amplify the modified genomic sequence from a gene
 CC associated with brain tumours
 XX
 SQ Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 7.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 774 CCTCAACACGCCAAC 789
 |||||
 Db 16 CCTCAACACCCCAAC 1

RESULT 746
 AAD41922
 ID AAD41922 standard; DNA; 18 BP.

XX AAD41922;
 AC
 DT 30-OCT-2002 (first entry)
 XX Human SRC-1 antisense oligonucleotide, ISIS 29855.
 XX
 KW Human; steroid receptor coactivator-1; SRC-1; antisense compound;
 KW diagnostic; therapeutic; prophylaxis; antisense therapy; antisense;
 KW phosphorothioate backbone; ss.
 XX Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers
 FH modified_base 1. .18
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 FT modified_base 1. .4
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2-methoxyethyl nucleotides"
 FT modified_base 3
 FT /*tag= d
 FT /mod_base= m5c
 FT modified_base 7
 FT /*tag= e
 FT /mod_base= m5c
 FT modified_base 13
 FT /*tag= f
 FT /mod_base= m5c
 FT modified_base 15. .18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2-methoxyethyl nucleotides"
 FT modified_base 15
 FT /*tag= g
 FT /mod_base= m5c

XX WO200244325-A2.
 PN
 XX 06-JUN-2002.
 PD
 XX 26-NOV-2001; 2001WO-US044179.

XX 27-NOV-2000; 2000US-00723379.
 PR (ISIS-) ISIS PHARM INC.
 PA (BAYU) BAYLOR COLLEGE MEDICINE.
 XX O'malley BW, Bennett CF, Cowseert LM;
 PI WPI; 2002-537447/57.
 DR
 XX Novel antisense compound targeted to nucleic acid molecules encoding
 PT human steroid receptor coactivator-1 (SRC-1), useful for inhibiting
 PT expression of SRC-1 in human cells or tissues.
 XX
 PS Example 15; Page 79; 103pp; English.
 XX

CC The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of human steroid receptor coactivator-1
 CC (SRC-1). The compositions comprise antisense oligonucleotides targeted
 CC to nucleic acids encoding SRC-1. The antisense compound is useful for
 CC inhibiting the expression of SRC-1 in human cells or tissues. It is also
 CC useful for treating a human having a disease or condition associated with
 CC SRC-1, by inhibiting expression of SRC-1. It is also useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC It is also used in antisense therapy. The present sequence is an
 CC antisense oligonucleotide targeted to human SRC-1 DNA. This sequence is
 CC used in the exemplification of the invention
 XX
 SQ Sequence 18 BP; 6 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 7.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 152 AGCTGTCATGCACT 167
 |||||
 Db 1 AGCTGTCATGCACT 16

RESULT 747
 ABZ10908

ID ABZ10908 standard; DNA; 18 BP.
 XX
 AC ABZ10908;
 XX
 DT 16-JAN-2003 (first entry)
 XX
 DE Haematopoietic cell proliferation disorder related oligonucleotide #1048.
 XX Human; haematopoietic cell proliferation disorder; cytostatic;
 KW gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
 KW cytosine methylation state; probe; primer; ss.
 XX Homo sapiens.
 OS Synthetic.
 OS
 PN WO20027272-A2.
 XX
 PD 03-OCT-2002.
 XX
 XX 26-MAR-2002; 2002WO-EP003401.
 PF
 XX 26-MAR-2001; 2001US-0278333P.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J;
 PI Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu B;
 PI Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Palet C;
 PI Schwöpe I, Ziebarth H;
 XX WPI; 2003-018942/01.
 DR
 XX

PT Detecting and differentiating between hematopoietic cell proliferative
 PT disorders, comprises contacting a target nucleic acid with a reagent that
 PT distinguishes between methylated and non-methylated CpG dinucleotides.
 XX
 PS Claim 15; Page 69; 117pp; English.

XX The present invention describes a method for detecting and
 CC differentiating between hematopoietic cell proliferative disorders
 CC associated with at least 1 gene and/or their regulatory regions in a
 CC subject. The method comprises contacting a target nucleic acid in a
 CC biological sample obtained from the subject with at least 1 reagent,
 CC which distinguishes between methylated and non-methylated CpG
 CC dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118
 CC represent specifically claimed nucleotide sequences from the present
 CC invention. Oligonucleotides from the present invention can be used: for
 CC differentiating between healthy hematopoietic cells and proliferative
 CC disorder hematopoietic cells; for differentiating between acute
 CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for
 CC determining the cytosine methylation state and/or single nucleotide
 CC polymorphisms (SNPs) of hematopoietic cell proliferation disorder
 CC related sequences and their complements; and as primers for the
 CC amplification of hematopoietic cell proliferation disorder related DNA
 CC sequences. The nucleotide sequences from the present invention can also
 CC be used for detecting a predisposition to, differentiation between
 CC subclasses, diagnosis, prognosis, treatment and/or monitoring of
 CC hematopoietic cell proliferative disorders. The present method enables a
 CC highly specific classification of hematopoietic cell proliferative
 CC disorders allowing for improved and informed treatment of patients
 XX
 SQ Sequence 18 BP; 1 A; 0 C; 10 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 7.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 225 TGAGAGTGGTGGTGGT 240
 ||||| ||||| ||||| |||||
 Db 3 TCAGGGTGGTGGTGGT 18

RESULT 748
 ADA20557/c
 ID ADA20557 standard; DNA; 18 BP.
 AC ADA20557;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Prostate tumour related gene USB PCR primer #2.
 XX
 KW Cytostatic; gene therapy; genetic marker; epigenetic parameter;
 KW classification; differentiation; diagnosis; prostate tumour;
 KW prostate cancer; cytosine methylation; uracil;
 KW single nucleotide polymorphism; SNP; prostate carcinoma; ss; primer; PCR.
 XX
 OS Homo sapiens.
 XX
 PN WO2002103042-A2.
 XX
 PD 27-DEC-2002.
 XX
 PF 14-JUN-2002; 2002WO-EP006605.
 XX
 PR 14-JUN-2001; 2001DE-01028508.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Distler J, Model F, Adorjan P;
 XX
 DR WPI; 2003-167536/16.
 XX
 PT Determining genetic and/or epigenetic parameters, useful for the
 PT classification, differentiation and/or diagnosis of prostate tumors or a

PT predisposition to prostate cancer, comprises analyzing cytosine
 PT methylation.
 XX
 PS Example 2; Page 19; 376pp; English.
 XX
 CC The invention relates to a method of determining genetic and/or
 CC epigenetic parameters for the classification, differentiation and/or
 CC diagnosis of prostate tumours or the predisposition to prostate cancer,
 CC by analysing cytosine methylation in a sample of genomic DNA. The method
 CC comprises chemically treating unmethylated cytosine bases at the 5-
 CC position to uracil or another base, which is dissimilar to cytosine in
 CC terms of hybridization behaviour; followed by amplifying at least one
 CC fragment of the chemically pre-treated genomic DNA using sets of primer
 CC oligonucleotides and a polymerase. The oligomers or probes derived from
 CC them are useful for detecting the methylation state of all CpG
 CC dinucleotides and/or single nucleotide polymorphisms (SNPs) in a
 CC chemically pre-treated genomic DNA. They are all useful for treating
 CC prostate carcinoma. This sequence represents an oligonucleotide used to
 CC amplify a gene possibly involved in predisposition to prostate cancer
 CC which may contain methylated or unmethylated CpG dinucleotides.
 XX

SQ Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 7.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 774 CCTCAACACGCCAAC 789
 ||||| ||||| ||||| |||||
 Db 16 CCTCAACACGCCAAC 1

RESULT 749
 ADA84360/c
 ID ADA84360 standard; DNA; 18 BP.
 XX
 AC ADA84360;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human UNG PCR primer 1.
 XX
 KW renal cancer; prostate cancer; cytosine methylation;
 KW single nucleotide polymorphism; histological; cytological; ss; primer;
 KW PCR.
 XX
 OS Homo sapiens.
 XX
 PN WO2002103041-A2.
 XX
 PD 27-DEC-2002.
 XX
 PF 14-JUN-2002; 2002WO-EP006603.
 XX
 PR 14-JUN-2001; 2001DE-01028509.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Distler J, Model F, Adorjan P;
 XX
 DR WPI; 2003-183991/18.
 XX
 PT Method for characterizing, classifying and/or differentiating renal and
 PT prostate cancers, by analyzing the genetic and/or epigenetic parameters
 PT of genomic DNA, particularly by determining its cytosine methylation
 PT status.
 XX
 PS Example 2; Page 19; 211pp; English.

XX The invention relates to a novel method for characterising, classifying
 CC and/or differentiating renal and prostate cancer. The method comprises
 CC extracting genomic DNA from a biological sample, converting cytosine
 CC bases (by chemical treatment) that are unmethylated at the 5-position to

uracil or another base, and amplifying at least one fragment of the chemically pretreated genomic DNA using sets of primer oligonucleotides and a polymerase. The method is useful for detecting the cytosine methylation state and/or single nucleotide polymorphisms in genomic DNA, particularly for characterizing, classifying and/or differentiating renal and prostate cancers. The oligomers are useful as primer oligonucleotides for the amplification of any of the 112 DNA sequences of the invention. The set of oligomer probes is useful for detecting the cytosine methylation state and/or single nucleotide polymorphisms in any of the 112 chemically pretreated genomic DNA sequences. The method is also useful for identifying the tissue of origin of cancer cells. The method allows the classification, differentiation and/or diagnosis of cancer tissues using minute samples which would be inadequate for histological or cytological analysis. The present sequence is used in the exemplification of the invention.

Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 7.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 774 CCTCAACACGCCAAC 789
 |||||
 Db 16 CCTCAACACGCCAAC 1

RESULT 750
 ABO80440/C
 ID ABO80440 standard; DNA; 18 BP.

AC ABO80440;

XX 04-DEC-2003 (first entry)

DE Primer: Rat PEPCCK forward.

XX Primer: amplify; PCR; PEPCCK; phosphoenolpyruvate carboxykinase; SHP;
 short heterodimer partner; Zucker; diabetic; fatty; rat; ZDF; insulin;
 gluconeogenesis; glucose production; hyperglycemia; hypocalcaemia;
 obesity; glucose tolerance; insulin resistance; metabolic syndrome X;
 Type 2; diabetes; Type 1; cardiovascular disease; ss.

XX Rattus rattus.

XX WO2003059253-A2.

XX 24-JUL-2003.

XX 18-DEC-2002; 2002WO-US040360.

XX 21-DEC-2001; 2001US-0344876P.

XX (SMIK) SMITHKLINE BEECHAM CORP.

XX Klierer SA, Goodwin BJ, Way JM;

XX WPI; 2003-627344/S9.

XX Composition useful for altering gluconeogenesis or glucose production in
 PT the treatment of e.g. insulin resistance or cardiovascular disease
 PT comprises an agent which modulates short heterodimer partner expression
 PT or activity.

XX Example 1; Page 12; 9pp; English.

XX The sequences given in ABO80440-45 are primers and probes which were used
 CC to determine PEPCCK (phosphoenolpyruvate carboxykinase) and SHP (short
 CC heterodimer partner) expression in Zucker diabetic fatty (ZDF) fa/fa rats
 CC treated with insulin. The composition of the invention for alteration of
 CC gluconeogenesis or glucose production comprises an agent which modulates
 CC SHP expression or activity. The composition is used for altering
 CC gluconeogenesis or production of glucose useful for treating

CC hyperglycemia or hypocalcaemia; for treating obesity, impaired glucose
 CC tolerance, insulin resistance, metabolic syndrome X, Type 2 diabetes,
 CC Type 1 diabetes, or cardiovascular disease. The agent induces, increases,
 CC inhibits or decreases expression or activity of SHP

XX Sequence 18 BP; 5 A; 0 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 7.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1481 TCCACAACTTCTGA 1496
 |||||
 Db 16 TCCACAACTTCTGA 1

RESULT 751
 AAD60490/C

ID AAD60490 standard; DNA; 18 BP.

AC AAD60490;

XX 18-DEC-2003 (first entry)

XX Human c-IAP-2 antisense oligonucleotide #ISIS #23463.

XX Human; antisense; cellular inhibitor of apoptosis-2; c-IAP-2; cancer;
 hyperproliferative condition; apoptosis inhibitor 2; autoimmune disease;
 API-1; hIAP-1; MHC; gene therapy; phosphorothioate; ss.

XX Homo sapiens.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..18

FT /*tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidine residues
 are 5-methylcytidines"

FT modified_base 1..4

FT /*tag= b

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

FT modified_base 15..18

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

XX US2003083300-A1.

XX 01-MAY-2003.

XX 16-JUL-2002; 2002US-00197290.

XX 23-SEP-1999; 99WO-US022083.

XX 04-OCT-2001; 2001US-00857299.

XX (BENNY/) BENNETT C F.

XX (ACKE/) ACKERMANN E J.

XX (COWS/) COWSERT L M.

XX Bennett CF, Ackermann EJ, Cowsert LM;

XX WPI; 2003-755119/71.

XX New antisense compound, preferably an oligonucleotide, for inhibiting
 PT expression of human Cellular Inhibitor of Apoptosis-2 in human cells or
 PT tissues, and for treating diseases, such as cancer or an autoimmune
 PT disease.

XX Claim 3; Page 22; 34pp; English.

XX The invention relates to antisense compounds targetted to a nucleic acid

CC encoding human cellular inhibitor of apoptosis-2 (also known as c-IAP-2,
 CC apoptosis inhibitor 2, API-1, hIAP-1 and MIHC) to inhibit its expression.
 CC Antisense compounds of the invention are used to induce apoptosis in
 CC human cells or tissues to treat diseases or conditions associated with
 CC insufficient apoptosis. They are used to treat diseases or conditions
 CC associated with c-IAP-2 such as hyperproliferative conditions especially
 CC cancer or autoimmune diseases. The invention is also useful in antisense
 CC gene therapy. The present sequence is an antisense oligonucleotide
 CC targetted to human c-IAP-2 DNA
 XX
 SQ Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 7.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 513 CCTGGAGAGCTGACC 528
 Db 16 CCTGGAGAGTTGACC 1

RESULT 752
 ADJ58324/c
 ID ADJ58324 standard; DNA; 18 BP.
 XX
 AC ADJ58324;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Primer of the invention #3.
 XX
 KW polymorphism; chum salmon; haplotype; primer; ss.
 XX
 OS Synthetic.

XX
 XX EP1319721-A1.
 XX
 PD 18-JUN-2003.
 XX
 PF 12-DEC-2002; 2002EP-00258583.
 XX
 PR 13-DEC-2001; 2001JP-00379926.
 XX
 PA (NISON) NISSHINBO IND INC.
 XX
 PI Moriya S, Ichihara T, Suzuki O, Urano A, Abe S;
 XX
 DR WPI; 2003-629114/60.
 XX
 PT Kit for determining haplotype of chum salmon, has substrate with
 PT immobilized oligonucleotides that detect polymorphisms in mitochondrial
 PT DNA control region of chum salmon, by hybridization with chum salmon
 PT nucleic acid.
 XX
 PS Disclosure; SEQ ID NO 67; 44pp; English.

XX
 CC The present invention relates to a kit for determining haplotype of
 CC Oncorhynchus keta, comprising oligonucleotide-immobilized substrate
 CC obtained by immobilizing, on substrate, one or more kinds of
 CC oligonucleotides that enable detection of polymorphism in a nucleotide
 CC sequence of mitochondrial DNA control region of chum salmon, by
 CC hybridization, and determining haplotype based on polymorphism or
 CC combination of polymorphisms. The oligonucleotides are useful for
 CC determining a haplotype of chum salmon by hybridizing a nucleic acid
 CC derived from the chum salmon with each oligonucleotide contained in the
 CC kit, detecting the presence or absence of formation of a hybrid of each
 CC oligonucleotide and the nucleic acid derived from the chum salmon and
 CC identifying a polymorphism in the nucleotide sequence of the chum salmon
 CC mitochondrial DNA control region. The present sequence represents a
 CC primer of the invention.

XX
 SQ Sequence 18 BP; 4 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 7.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 615 CTACATTAAGCTGGAC 630
 Db 17 CTACATTAAGCAGGAC 2

RESULT 753
 ADH70727/c
 ID ADH70727 standard; DNA; 18 BP.
 XX
 AC ADH70727;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human Vbeta gene repeat sequence #517.

XX
 KW human; T-cell associated disease; Vbeta; autoimmune disease;
 KW degenerative nervous system disease; graft versus host disease;
 KW hypersensitivity disease; infectious disease; neoplastic disease;
 KW Addison's disease; atrophic gastritis;
 KW degenerative nervous system disease; multiple sclerosis;
 KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 KW allergy; type II hypersensitivity; Goodpasture's syndrome;
 KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
 KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 KW breast cancer; ds.

XX Homo sapiens.

OS US2002150891-A1.

XX
 PD 17-OCT-2002.

XX
 PF 05-MAR-1999; 99US-00263959.

XX
 PR 19-SEP-1994; 94US-00309335.

XX
 PR 19-SEP-1995; 95US-00531241.

XX (HOOD/) HOOD L E.

XX (ROWE/) ROWEN L.

PI Hood LE, Rowen L;

XX WPI; 2004-059052/06.

XX
 PT Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.

XX
 PS Disclosure; SEQ ID NO 921; 164pp; English.

XX
 CC The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetarNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases,
 CC graft versus host disease, hypersensitivity diseases, infectious diseases
 CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
 CC atrophic gastritis. Degenerative nervous system diseases include multiple
 CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 CC I hypersensitivities such as contact with allergens that lead to
 CC allergies, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by

CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.

SQ Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 7.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCGG 245
 Db 17 GTGGTGGTGGTGGTGG 2

RESULT 754
 ADO49036/C
 ID ADO49036 standard; DNA; 18 BP.

XX AC ADO49036;
 XX DT 12-AUG-2004 (first entry)
 XX DE Labelling molecule associated oligohistidine target molecule DNA.

XX labelling molecule; conjugate; transition metal compound;
 KW detectable group; labelling; detection; hexahistidine target sequence;
 KW oligohistidine; ds.

XX Synthetic.

XX Key Location/Qualifiers
 FH 1..18
 FT /*tag= a
 FT /product= "Labeling molecule associated oligohistidine
 FT target molecule"
 FT /partial
 FT /note= "No start or stop codon"

XX US2004096887-A1.

XX 20-MAY-2004.

XX 17-SEP-2003; 2003US-00665227.

XX 12-NOV-2002; 2002WO-US036180.

XX (RUTF) UNIV RUTGERS STATE NEW JERSEY.

XX Ebright RH, Ebright YW;

XX WPI; 2004-447681/42.

XX P-PSDB; ADO49029.

XX Molecule useful for labeling target material, for detecting target
 PT material and for imparting detectable properties to target material,
 PT comprises conjugate of transition metal compound with detectable group.

XX Example 3; Page 20; 41pp; English.

XX The invention describes a molecule (M) for labelling a target material,
 CC comprising a conjugate of a transition metal compound with a detectable
 CC group, the conjugate having the general structural Formula (I), its
 CC tautomers, salts, and acids. (M) is useful for detecting a target
 CC material, for imparting a detectable property to a target material, for
 CC monitoring a binding process, for monitoring a reaction, for isolating a
 CC target material of interest, and for detecting one or more molecules that
 CC include a target sequence. The two transition metal chelates are useful
 CC for labelling, detecting, and analysing target materials containing
 CC oligohistidine target. (M) binds with high affinity and specificity to
 CC oligohistidine target sequences, particularly hexahistidine target
 CC sequence. This sequence encodes an oligohistidine suitable as a target

CC material for the label of the invention.

XX Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 7.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCGG 245
 Db 18 GTGGTGGTGGTGGTGG 3

RESULT 755
 ADO26656
 ID ADO26656 standard; DNA; 18 BP.

XX AC ADO26656;

XX DT 12-AUG-2004 (first entry)

XX Synthetic leader sequence encoding DNA SEQ ID NO:49.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

XX Synthetic.

XX WO2004042059-A1.

XX 21-MAY-2004.

XX 10-NOV-2003; 2003WO-AU001487.

XX 08-NOV-2002; 2002US-0425163P.

XX (UYQU) UNIV QUEENSLAND.

XX Frazer IH;

XX WPI; 2004-411519/38.

XX P-PSDB; ADO26657.

XX Constructing synthetic polynucleotide for modulating the quality of a
 PT selected phenotype displayed by an organism comprises replacing a first
 PT codon with a synonymous codon to construct the synthetic polynucleotide.

XX Example 1; SEQ ID NO 49; 86pp; English.

XX The present invention describes a method for constructing a synthetic
 CC polynucleotide from which a polypeptide is producible to confer a
 CC selected phenotype to an organism of interest or part in a different
 CC quality than that conferred by a parent polynucleotide that encodes the
 CC same polypeptide. The method comprises: (a) selecting a first codon of
 CC the parent polynucleotide for replacement with a synonymous codon, where
 CC the synonymous codon is selected on the basis that it exhibits a
 CC different phenotypic preference than the first codon in a comparison of
 CC phenotypic preferences in test organisms or parts, where the test
 CC organism are selected from organisms of the same species as the organism
 CC of interest and organisms that are related to the organisms of interest;
 CC and (b) replacing the first codon with the synonymous codon to construct
 CC the synthetic polynucleotide. Also described: (1) a method for
 CC determining the phenotypic preference of a first codon in an organism of
 CC interest or its parts; (2) a synthetic polynucleotide constructed from
 CC the method above; (3) an organism or interest or part containing a
 CC synthetic polynucleotide constructed from the method above; (4) an
 CC organism or interest or part containing a synthetic construct that
 CC comprises a regulatory polynucleotide operably linked to a tandem repeat
 CC of a first codon fused in frame with a reporter polynucleotide that
 CC encodes a reporter protein, which produces, or is predicted to produce a
 CC selected phenotype or a phenotype of the same class as the selected
 CC phenotype in the organism or part; (5) a method of modulating the quality
 CC of a selected phenotype that is displayed by an organism of interest or
 CC part and that results from the expression of a parent polynucleotide that

CC encodes the polypeptide; (6) a method of enhancing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; and (7) a method of reducing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide. The method is useful for constructing a
CC synthetic polynucleotide from which a polypeptide is producible to confer
CC a selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. It is useful for modulating the quality of a selected
CC phenotype displayed by an organism or part. The present sequence encodes
CC a synthetic leader sequence, which is used in an example from the present
XX invention.

XX SQ Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 7.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCGG 245

Db 2 GTGGTGGTGGTGGTGG 17
|||||

RESULT 756

ADO26694/c

ID ADO26694 standard; DNA; 18 BP.

XX AC ADO26694;

XX AC ADO26694;

DT 12-AUG-2004 (first entry)

XX Synthetic leader sequence encoding DNA SEQ ID NO:87.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

XX Synthetic.

XX WO2004042059-A1.

XX PD 21-MAY-2004.

XX PF 10-NOV-2003; 2003WO-AU001487.

XX PR 08-NOV-2002; 2002US-0425163P.

XX PA (UYQU) UNIV QUEENSLAND.

XX PI Frazer IH;

XX WPI; 2004-411519/38.

XX P-PSDB; ADO26695.

XX Constructing synthetic polynucleotide for modulating the quality of a
XX selected phenotype displayed by an organism comprises replacing a first
XX codon with a synonymous codon to construct the synthetic polynucleotide.

XX Example 1; SEQ ID NO 87; 86pp; English.

XX The present invention describes a method for constructing a synthetic
XX polynucleotide from which a polypeptide is producible to confer a
XX selected phenotype to an organism of interest or part in a different
XX quality than that conferred by a parent polynucleotide that encodes the
XX same polypeptide. The method comprises: (a) selecting a first codon of
XX the parent polynucleotide for replacement with a synonymous codon, where
XX the synonymous codon is selected on the basis that it exhibits a
XX different phenotypic preference than the first codon in a comparison of
XX phenotypic preferences in test organisms or parts, where the test
XX organism are selected from organisms of the same species as the organism
XX of interest and organisms that are related to the organisms of interest;
XX and (b) replacing the first codon with the synonymous codon to construct

CC the synthetic polynucleotide. Also described: (1) a method for
CC determining the phenotypic preference of a first codon in an organism of
CC interest or its parts; (2) a synthetic polynucleotide constructed from
CC the method above; (3) an organism of interest or part containing a
CC synthetic polynucleotide constructed from the method above; (4) an
CC organism of interest or part containing a synthetic construct that
CC comprises a regulatory polynucleotide operably linked to a tandem repeat
CC of a first codon fused in frame with a reporter polynucleotide that
CC encodes a reporter protein, which produces, or is predicted to produce a
CC selected phenotype or a phenotype of the same class as the selected
CC phenotype in the organism or part; (5) a method of modulating the quality
CC of a selected phenotype that is displayed by an organism of interest or
CC part and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; (6) a method of enhancing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; and (7) a method of reducing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide. The method is useful for constructing a
CC synthetic polynucleotide from which a polypeptide is producible to confer
CC a selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. It is useful for modulating the quality of a selected
CC phenotype displayed by an organism or part. The present sequence encodes
CC a synthetic leader sequence, which is used in an example from the present
XX invention.

XX SQ Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 7.4e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCGG 245

Db 16 GTGGTGGTGGTGGTGG 1
|||||

RESULT 757

ADO26714/c

ID ADO26714 standard; DNA; 18 BP.

XX AC ADO26714;

XX AC ADO26714;

DT 12-AUG-2004 (first entry)

XX Synthetic leader sequence encoding DNA SEQ ID NO:107.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

XX Synthetic.

XX WO2004042059-A1.

XX PD 21-MAY-2004.

XX PF 10-NOV-2003; 2003WO-AU001487.

XX PR 08-NOV-2002; 2002US-0425163P.

XX (UYQU) UNIV QUEENSLAND.

XX PI Frazer IH;

XX WPI; 2004-411519/38.

XX P-PSDB; ADO26715.

XX Constructing synthetic polynucleotide for modulating the quality of a
XX selected phenotype displayed by an organism comprises replacing a first
XX codon with a synonymous codon to construct the synthetic polynucleotide.

XX Example 1; SEQ ID NO 107; 86pp; English.

XX CC The present invention describes a method for constructing a synthetic
CC polynucleotide from which a polypeptide is producible to confer a
CC selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. The method comprises: (a) selecting a first codon of
CC the parent polynucleotide for replacement with a synonymous codon, where
CC the synonymous codon is selected on the basis that it exhibits a
CC different phenotypic preference than the first codon in a comparison of
CC phenotypic preferences in test organisms or parts, where the test
CC organism are selected from organisms of the same species as the organism
CC of interest and organisms that are related to the organisms of interest;
CC and (b) replacing the first codon with the synonymous codon to construct
CC the synthetic polynucleotide. Also described: (1) a method for
CC determining the phenotypic preference of a first codon in an organism of
CC interest or its parts; (2) a synthetic polynucleotide constructed from
CC the method above; (3) an organism of interest or part containing a
CC synthetic polynucleotide constructed from the method above; (4) an
CC organism of interest or part containing a synthetic construct that
CC comprises a regulatory polynucleotide operably linked to a tandem repeat
CC of a first codon fused in frame with a reporter polynucleotide that
CC encodes a reporter protein, which produces, or is predicted to produce a
CC selected phenotype or a phenotype of the same class as the selected
CC phenotype in the organism or part; (5) a method of modulating the quality
CC of a selected phenotype that is displayed by an organism of interest or
CC part and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; (6) a method of enhancing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; and (7) a method of reducing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide. The method is useful for constructing a
CC synthetic polynucleotide from which a polypeptide is producible to confer
CC a selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. It is useful for modulating the quality of a selected
CC phenotype displayed by an organism or part. The present sequence encodes
CC a synthetic leader sequence, which is used in an example from the present
CC invention.

XX SQ Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 7.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCGG 245

Db 17 GTGGTGGTGGTGGTG 2

RESULT 758

ADO26658/c

ID ADO26658 standard; DNA; 18 BP.

AC ADO26658;

DT 12-AUG-2004 (first entry)

XX Synthetic leader sequence encoding DNA SEQ ID NO:51.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

OS Synthetic.

XX WO2004042059-A1.

XX 21-MAY-2004.

XX 10-NOV-2003; 2003WO-AU001487.

XX 08-NOV-2002; 2002US-0425163P.

XX PA (UYQU) UNIV QUEENSLAND.

XX PI Frazer IH;

XX WPI; 2004-411519/38.

XX P-PSDB; ADO26659.

XX Constructing synthetic polynucleotide for modulating the quality of a
PT selected phenotype displayed by an organism comprises replacing a first
PT codon with a synonymous codon to construct the synthetic polynucleotide.
PS Example 1; SEQ ID NO 51; 86pp; English.

XX CC The present invention describes a method for constructing a synthetic
CC polynucleotide from which a polypeptide is producible to confer a
CC selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. The method comprises: (a) selecting a first codon of
CC the parent polynucleotide for replacement with a synonymous codon, where
CC the synonymous codon is selected on the basis that it exhibits a
CC different phenotypic preference than the first codon in a comparison of
CC phenotypic preferences in test organisms or parts, where the test
CC organism are selected from organisms of the same species as the organism
CC of interest and organisms that are related to the organisms of interest;
CC and (b) replacing the first codon with the synonymous codon to construct
CC the synthetic polynucleotide. Also described: (1) a method for
CC determining the phenotypic preference of a first codon in an organism of
CC interest or its parts; (2) a synthetic polynucleotide constructed from
CC the method above; (3) an organism of interest or part containing a
CC synthetic polynucleotide constructed from the method above; (4) an
CC organism of interest or part containing a synthetic construct that
CC comprises a regulatory polynucleotide operably linked to a tandem repeat
CC of a first codon fused in frame with a reporter polynucleotide that
CC encodes a reporter protein, which produces, or is predicted to produce a
CC selected phenotype or a phenotype of the same class as the selected
CC phenotype in the organism or part; (5) a method of modulating the quality
CC of a selected phenotype that is displayed by an organism of interest or
CC part and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; (6) a method of enhancing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; and (7) a method of reducing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide. The method is useful for constructing a
CC synthetic polynucleotide from which a polypeptide is producible to confer
CC a selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. It is useful for modulating the quality of a selected
CC phenotype displayed by an organism or part. The present sequence encodes
CC a synthetic leader sequence, which is used in an example from the present
CC invention.

XX SQ Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 7.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCGG 245

Db 18 GTGGTGGTGGTGGTG 3

RESULT 759

ADO26720

ID ADO26720 standard; DNA; 18 BP.

XX ADO26720;

XX 12-AUG-2004 (first entry)

XX

XX 14-MAY-1998 (first entry)
DT Sense primer Exon 11 for human 5-lipoxygenase gene.
DE
XX Inflammatory disease; polymorphism; 5-lipoxygenase; asthma;
KW ulcerative colitis; bronchitis; sinusitis; psoriasis; rhinitis;
KW arthritis; diagnosis; treatment; PCR primer; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX WO9742347-A2.
PN
XX 13-NOV-1997.
PD
XX
XX 29-APR-1997; 97WO-US007137.
PF
XX 06-MAY-1996; 96US-0016890P.
PR
XX 25-APR-1997; 97US-00846020.
PR
XX (BGM) BRIGHAM & WOMENS HOSPITAL.
PA
XX Drazen JM, In K, Asano K, Beier D, Grobholz J;
PI WPI; 1997-558997/51.
DR
XX Classifying patients with inflammatory disease, specifically asthma -
PT according to polymorphisms in 5-lipoxygenase gene regulatory region, e.g.
PT to identify candidates for lipoxygenase inhibitor treatment.
XX
XX Example 1; Page 19; 56pp; English.
PS
XX The present sequence was used in the development of a novel method for
CC classifying patients suffering from an inflammatory disease. The method
CC comprises identifying in DNA from at least 1 patient a sequence
CC polymorphism, as compared with the normal 5-lipoxygenase (5-LOX) gene
CC (AAT88431), in a 5-LOX regulatory gene sequence. The method can be
CC applied to subjects with asthma, ulcerative colitis, bronchitis,
CC sinusitis, psoriasis, allergic and non-allergic rhinitis, lupus or
CC rheumatoid arthritis. Specifically it can be used to diagnose asthma or
CC susceptibility to disease, identify treatments suitable for individual
CC patients or assess the likely success of treatment
XX
XX Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 7.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX

QY 1716 CCTGAGCCATGTTTCAC 1731
Db 3 CCTGAGCCAGGTTTCAC 18

RESULT 762
AAA82758
ID AAA82758 standard; DNA; 19 BP.
XX
XX AAA82758;
AC
XX 04-DEC-2000 (first entry)
DT
XX cdk3 ribozyme binding site #43.
DE
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
KW
XX Mammalia.
OS
XX WO200032765-A2.
PN
XX 08-JUN-2000.
PD
XX

PF 06-DEC-1999; 99WO-US028772.
XX
PR 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
PA
XX Tritz R, Welch PU, Barber JR, Robbins JM;
PI WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 51; 109pp; English.
PS
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 7.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX

QY 996 CCTGCTCATCAACGAG 1011
Db 1 CCTGCTCATCAATGAG 16

RESULT 763
AAA14782/c
ID AAA14782 standard; DNA; 19 BP.
XX
XX AAA14782;
AC
XX 08-AUG-2000 (first entry)
DT
XX PCR primer used to isolate DNA encoding a decorin binding protein.
DE
XX Decorin binding protein; DbpA; DbpB; adhesin; infection; Lyme disease;
KW spirochete infection; vaccine; passive immunotherapy; PCR primer; ss.
XX
XX Borrelia burgdorferi.
OS
XX WO200021989-A1.
PN
XX 20-APR-2000.
PD
XX
XX 08-OCT-1999; 99WO-US023481.
PF
XX 09-OCT-1998; 98US-0103728P.
PR
XX (MEDI-) MEDIMUNE INC.
PA
XX Hanson MS, Mullikin BA, Roberts W, Lathigra R;
PI WPI; 2000-317936/27.
XX
XX Novel decorin binding proteins, DBP A and B useful as vaccines for
PT protecting humans against Lyme disease and as immunogens for production
PT of antibodies used in passive immunotherapy, or as diagnostic reagents.
XX
XX Disclosure; Page 86; 93pp; English.
PS
XX The present sequence represents a primer which was used to isolate DNA
CC encoding a decorin binding protein (Dbp). The specification describes

CC DbpA and DbpB. DbpA and DbpB are adhesins, and are immunogenic. DbpA is a
CC target for antibody-mediated killing of B. burgdorferi during the early
CC stages of infection. The polypeptides are useful for producing antibodies
CC to diagnose Lyme disease (spirochete infections), or for producing
CC vaccines for prophylaxis and/or treatment of such infections. The
CC antibodies may be useful in passive immunotherapy, as diagnostic reagents
CC and as reagents in other processes such as affinity chromatography
XX
SQ Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 7.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 910 GTGAACTGTTCCCTGT 925
DB 17 GTGTAACGTGTTCCCTGT 2

RESULT 764
AAZ57154
ID AAZ57154 standard; DNA; 19 BP.

XX AC AAZ57154;

XX DT 03-APR-2000 (first entry)

XX DE Phosphorothioate 19-mer oligonucleotide #6.

XX KW Phosphorothioate; activator; oligonucleotide synthesis; phosphoramidite;
XX KW phosphitylating reagent; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 1..19
FT /*tag= a
FT /note= "phosphorothioate linkages"

XX WO9962922-A1.

XX PD 09-DEC-1999.

XX PE 02-JUN-1999; 99WO-US012251.

XX PR 02-JUN-1998; 98US-0087757P.

XX PR 23-OCT-1998; 98US-00177953.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Sanghvi Y, Manoharan M, Ravikumar VT;

XX DR WPI; 2000-097311/08.

XX PT Preparation of nucleoside phosphoramidites and oligonucleotides.

XX PS Example 26; Page 84; 153pp; English.

XX CC The present invention describes nucleoside phosphoramidites and
XX CC oligonucleotides (ON's) prepared using pyridinium, imidazolium or
XX CC benzimidazolium salts as activators. The preparation of a phosphitylated
XX CC compound comprises reacting a compound having a hydroxyl group with a
XX CC phosphitylating reagent in the presence of a pyridinium salt in a
XX CC solvent. The phosphoramidites are useful as building blocks for synthesis
XX CC of oligonucleotides, which are potentially useful in therapeutic and
XX CC diagnostic applications. The activators can be produced in situ by mixing
XX CC pyridine and an acid, producing benefits in large scale synthesis.
XX CC Compared with conventional activators, e.g. 1H tetrazole, the pyridinium
XX CC salts, and materials necessary for their generation in situ, are non-
XX CC explosive and easier to store, and also cheaper and have higher
XX CC solubility in organic solvents. Final purity of the phosphitylated
XX CC material results from use of a less acidic reaction medium when
XX CC pyridinium salts are used. The present sequence represents a

CC phosphorothioate 19-mer oligonucleotide, the synthesis of which is
CC described in an example from the present invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 12 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 7.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCGG 245
DB 3 GTGGTGGTGGTGGCGG 18

RESULT 765
AAF80370/C
ID AAF80370 standard; DNA; 19 BP.

XX AC AAF80370;

XX DT 29-JUN-2001 (first entry)

XX DE PCR primer for osteoblast-associated marker OPN.

XX KW Osteogen related receptor alpha; ERRalpha; osteoblast proliferation;
XX KW osteoblast differentiation; bone loss; osteoporosis; osteoarthritis;
XX KW Paget's disease; periodontal disease; osteolytic bone tumour;
XX KW osteochondrodysplasia; osteogenesis imperfecta; osteomalacia;
XX KW sclerosing bone dysplasia; fibrodysplasia ossificans progressiva;
XX KW osteoblastic bone metastasis; prostate cancer; osteosarcoma; PCR primer;
XX KW ss.

XX OS Rattus sp.

XX PN WO200122988-A1.

XX PD 05-APR-2001.

XX PF 30-AUG-2000; 2000WO-CA001015.

XX PR 30-SEP-1999; 99CA-02284103.

XX PA (AUBI/) AUBIN J E.

XX PA (BONN/) BONNELYE E.

XX PI Aubin JE, Bonnelye E;

XX DR WPI; 2001-273487/28.

XX PT Modulating osteoblast proliferation or differentiation for treating bone
XX PT diseases, e.g. osteoporosis, bone tumor, comprises administering an
XX PT estrogen related receptor (ERR) alpha agonist, antagonist, antibody or
XX PT ERR alpha gene.

XX PS Disclosure; Page 30; 73pp; English.

XX CC PCR primers AAF80364-83 were used to amplify osteoblast-associated
XX CC markers. The specification describes a method for increasing or reducing
XX CC osteoblast proliferation or differentiation. The method comprises
XX CC administering an estrogen related receptor alpha (ERRalpha) agonist or
XX CC antagonist, a purified ERRalpha or antibody, a nucleotide sequence
XX CC encoding ERRalpha, an ERRalpha antisense sequence, or an ERRalpha
XX CC modulator. The method is useful for increasing or reducing osteoblast
XX CC proliferation or differentiation in a mammal. The method may be used for
XX CC treating a disorder associated with bone loss, such as osteoporosis,
XX CC osteoarthritis, Paget's disease, periodontal disease, osteolytic bone
XX CC tumour metastases in e.g. breast cancer and multiple myeloma,
XX CC osteochondrodysplasias, osteogenesis imperfecta, sclerosing bone
XX CC dysplasias and osteomalacia. The method may also be used for treating
XX CC fibrodysplasia ossificans progressiva, or osteoblastic bone metastases,
XX CC such as prostate cancer and osteosarcomas
XX
SQ Sequence 19 BP; 3 A; 6 C; 6 G; 4 T; 0 U; 0 Other;


```
XX SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. NO. 7.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 373 CAGGCTTCAGCCACGT 388
    |||||
Db 19 CAGGCTTCAGCCAAGT 4

RESULT 766
AAH57920
ID AAH57920 standard; DNA; 19 BP.
AC AAH57920;
XX
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:344.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulneryary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; virucide;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 97; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulneryary, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
```

```
XX SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. NO. 7.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 996 CCTGCTCATCAACGAG 1011
    |||||
Db 1 CCTGCTCATCAATGAG 16

RESULT 767
ADA25683
ID ADA25683 standard; RNA; 19 BP.
XX
XX ADA25683;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human REL-A short interfering nucleic acid SEQ ID NO:31.
XX
DE short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB;
XX RNA interference; vasotropic; neurotropic; antiparkinsonian;
KW neuroprotective; cytostatic; antiinflammatory; antiallergic; virucide;
KW anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; gene therapy;
KW modulation; inhibition; zosterosis; central nervous system lesion;
KW Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy;
KW dementia; amyotrophic lateral sclerosis; cancer;
KW polycystic kidney disease; inflammatory disease; allergic disease;
KW viral infection; HIV; autoimmune disease; transplant rejection; ribozyme;
KW human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;
KW nuclear factor; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO2003070970-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US004951.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX
XX 11-MAR-2002; 2002US-0363124P.
XX
XX 06-JUN-2002; 2002US-0386782P.
XX
XX 29-AUG-2002; 2002US-0406784P.
XX
XX 05-SEP-2002; 2002US-0408378P.
XX
XX 09-SEP-2002; 2002US-0409293P.
XX
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L;
XX
XX WPI; 2003-689788/65.
XX
XX New short interfering nucleic acid downregulates expression of the NF-
XX kappaB gene useful e.g. for treatment and diagnosis of cancer and
XX inflammation.
XX
XX Example 3; Page 127; 149pp; English.
XX
XX The present invention describes a short interfering nucleic acid (siNA)
XX that downregulates expression of a nuclear factor kappa B (NF-kappaB)
XX gene by RNA interference. Also described: (1) kits for in vitro or in
XX vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3)
XX vectors that express siNA. The siNAs have vasotropic, neurotropic,
XX antiparkinsonian, neuroprotective, cytostatic, antineoplastic,
XX antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and
XX nephrotropic activities, and can be used in gene therapy, and for the
XX modulation (inhibition) of expression or activity of NF-kappaB by RNA
XX interference (siNA target mRNA, RNA splice variants, post-
```


CC transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA
 CC sequences can be used to modulate expression of NF-kappaB genes, in
 CC cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in
 CC grafts and transplants for treating restenosis and central nervous system
 CC lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases,
 CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many
 CC cancers, other proliferative diseases (restenosis and polycystic kidney
 CC disease), inflammatory and/or allergic diseases, viral infections
 CC (including HIV), autoimmune diseases and transplant rejection, and also
 CC for drug screening; diagnosis; target identification and validation;
 CC genetic engineering; pharmacogenomics; studying gene function and gene
 CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
 CC represents human v-rel reticuloendotheliosis viral oncogene homologue A
 CC (REL-A) siNA, which is used in the exemplification of the present
 CC invention. REL-A is a nuclear factor of the kappa light polypeptide gene
 CC enhancer in B-cells.

XX
 SQ Sequence 19 BP; 4 A; 6 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 68.8%; Pred. No. 7.7e+02;
 Matches 11; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

Qy 538 CCCATCTTTGACAGC 553
 |||||:|||||
 Db 1 CCCAUCUUUGACAUC 16

RESULT 768
 ADA26032/c
 ID ADA26032 standard; RNA; 19 BP.

XX
 AC ADA26032;

XX
 DT 20-NOV-2003 (first entry)

XX
 DE Human REL-A short interfering nucleic acid SEQ ID NO:167.

XX
 KW short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB;
 KW RNA interference; vasotropic; neurotropic; antiparkinsonian;
 KW neuroprotective; cytostatic; antiinflammatory; anti-allergic; virucide;
 KW anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; gene therapy;
 KW modulation; inhibition; restenosis; central nervous system lesion;
 KW Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy;
 KW dementia; amyotrophic lateral sclerosis; cancer;
 KW polycystic kidney disease; inflammatory disease; allergic disease;
 KW viral infection; HIV; autoimmune disease; transplant rejection; ribozyme;
 KW human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;
 KW nuclear factor; ss.

XX
 OS Synthetic.

OS Homo sapiens.

XX
 PN WO2003070970-A2.

XX
 PD 28-AUG-2003.

XX
 PF 20-FEB-2003; 2003WO-US004951.

XX
 PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0366782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX
 PA (RIBO-) RIBOZYME PHARM INC.

XX
 PI Mcswiggen J, Beigelman L;

XX
 DR WPI; 2003-689788/65.

PT New short interfering nucleic acid downregulates expression of the NF-
 PT kappaB gene useful e.g. for treatment and diagnosis of cancer and
 PT inflammation.

XX
 XX Example 3; Page 127; 149pp; English.

XX
 CC The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of a nuclear factor kappa B (NF-kappaB)
 CC gene by RNA interference. Also described: (1) kits for in vitro or in
 CC vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3)
 CC vectors that express siNA. The siNAs have vasotropic, neurotropic,
 CC antiparkinsonian, neuroprotective, cytostatic, antiinflammatory,
 CC anti-allergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and
 CC nephrotropic activities, and can be used in gene therapy, and for the
 CC modulation (inhibition) of expression or activity of NF-kappaB by RNA
 CC interference (siNA target mRNA, RNA splice variants, post-
 CC transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA
 CC sequences can be used to modulate expression of NF-kappaB genes, in
 CC cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in
 CC grafts and transplants for treating restenosis and central nervous system
 CC lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases,
 CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many
 CC cancers, other proliferative diseases (restenosis and polycystic kidney
 CC disease), inflammatory and/or allergic diseases, viral infections
 CC (including HIV), autoimmune diseases and transplant rejection, and also
 CC for drug screening; diagnosis; target identification and validation;
 CC genetic engineering; pharmacogenomics; studying gene function and gene
 CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
 CC represents human v-rel reticuloendotheliosis viral oncogene homologue A
 CC (REL-A) siNA, which is used in the exemplification of the present
 CC invention. REL-A is a nuclear factor of the kappa light polypeptide gene
 CC enhancer in B-cells.

XX
 SQ Sequence 19 BP; 6 A; 3 C; 6 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 93.8%; Pred. No. 7.7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 538 CCCATCTTTGACAGC 553
 |||||:|||||
 Db 19 CCCATCTTTGACAATC 4

RESULT 769
 ADF71314/c
 ID ADF71314 standard; RNA; 19 BP.

XX
 AC ADF71314;

XX
 DT 12-FEB-2004 (first entry)

XX
 DE Protein tyrosine phosphatase type IV (PRL3) gene siNA, SEQ ID No 99.

XX
 KW short interfering nucleic acid; siNA;
 KW protein tyrosine phosphatase type IV; PRL3; RNA interference; cytostatic;
 KW cancer; ss.

XX
 OS Homo sapiens.

XX
 PN WO2003070886-A2.

XX
 PD 28-AUG-2003.

XX
 PF 11-FEB-2003; 2003WO-US004347.

XX
 PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0366782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

```
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Usman N;
PI
XX WPI; 2003-697606/66.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of a protein tyrosine
PT phosphatase type IVa gene.
XX
XX Example 3; SEQ ID NO 99; 131pp; English.
XX
XX The invention relates to a novel short interfering nucleic acid (siNA)
CC that downregulates expression of a protein tyrosine phosphatase type IV
CC (PRL3) gene by RNA interference. The invention further relates to
CC modulating the expression of PRL3 genes in cells, tissue explants or
CC organisms by the introduction of an siNA; kits for in vitro or in vivo
CC delivery of an siNA; conjugates and/or complexes of siNA; and vectors
CC that express siNA. The novel siNA's of the invention have cytostatic
CC activity. siNA's are used to modulate expression of PRL3 genes, in cells,
CC screening; diagnosis; target identification and validation; genetic
CC engineering; pharmacogenomics; studying gene function and gene mapping
CC (e.g. of single-nucleotide polymorphisms). This polynucleotide sequence
CC represents a short interfering nucleic acid for downregulating the
CC expression of a protein tyrosine phosphatase type IV (PRL3) gene of the
CC invention.
XX
XX Sequence 19 BP; 4 A; 6 C; 2 G; 0 T; 7 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 7.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 857 AGGACCTGAAGCAGTA 872
Db 16 AGGACCTGAAGAAGTA 1

RESULT 770
ADF71240
ID ADF71240 standard; RNA; 19 BP.
XX
XX ADF71240;
XX
DT 12-FEB-2004 (first entry)
XX
DE Protein tyrosine phosphatase type IV (PRL3) gene siNA, SEQ ID NO 25.
XX
KW short interfering nucleic acid; siNA;
KW protein tyrosine phosphatase type IV; PRL3; RNA interference; cytostatic;
KW Cancer; ss.
XX
XX Homo sapiens.
XX
XX WO2003070886-A2.
XX
XX 28-AUG-2003.
XX
XX 11-FEB-2003; 2003WO-US004347.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX
XX 11-MAR-2002; 2002US-0363124P.
XX
XX 06-JUN-2002; 2002US-0386782P.
XX
XX 29-AUG-2002; 2002US-0406784P.
XX
XX 05-SEP-2002; 2002US-0408378P.
XX
XX 09-SEP-2002; 2002US-0409293P.
XX
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J, Beigelman L, Usman N;
PI
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XX WPI; 2003-697606/66.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of a protein tyrosine
PT phosphatase type IVa gene.
XX
XX Example 3; SEQ ID NO 25; 131pp; English.
XX
XX The invention relates to a novel short interfering nucleic acid (siNA)
CC that downregulates expression of a protein tyrosine phosphatase type IV
CC (PRL3) gene by RNA interference. The invention further relates to
CC modulating the expression of PRL3 genes in cells, tissue explants or
CC organisms by the introduction of an siNA; kits for in vitro or in vivo
CC delivery of an siNA; conjugates and/or complexes of siNA; and vectors
CC that express siNA. The novel siNA's of the invention have cytostatic
CC activity. siNA's are used to modulate expression of PRL3 genes, in cells,
CC tissue explants or organisms, e.g. for treating cancer but also for drug
CC screening; diagnosis; target identification and validation; genetic
CC engineering; pharmacogenomics; studying gene function and gene mapping
CC (e.g. of single-nucleotide polymorphisms). This polynucleotide sequence
CC represents a short interfering nucleic acid for downregulating the
CC expression of a protein tyrosine phosphatase type IV (PRL3) gene of the
CC invention.
XX
XX Sequence 19 BP; 7 A; 2 C; 6 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 81.2%; Pred. No. 7.7e+02;
Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 857 AGGACCTGAAGCAGTA 872
Db 4 AGGACCTGAAGAAGUA 19

RESULT 771
AAL51775/c
ID AAL51775 standard; DNA; 19 BP.
XX
XX AAL51775;
XX
DT 24-APR-2003 (first entry)
XX
DE TNF alpha PCR primer #2.
XX
KW Screening; G protein-coupled receptor; cholesterol metabolism; ss;
KW inflammatory disease; transplantation rejection; immune insufficiency;
KW infection; PCR; primer; TNF alpha.
XX
XX Unidentified.
XX
XX WO200284286-A1.
XX
XX 24-OCT-2002.
XX
XX 11-APR-2002; 2002WO-JP003613.
XX
XX 12-APR-2001; 2001JP-00114203.
XX
XX 14-JUN-2001; 2001JP-00180562.
XX
XX 16-JUL-2001; 2001JP-00214922.
XX
XX 27-DEC-2001; 2001JP-00397767.
XX
XX 22-FEB-2002; 2002JP-00045728.
XX
XX (TAKE ) TAKEDA CHEM IND LTD.
XX
XX Hinuma S, Fujii R, Kawamata Y, Miwa M, Hosoya M;
PI
XX WPI; 2003-075569/07.
XX
XX Screening method for agonists or antagonists to alter binding properties
PT of novel G protein-coupled receptor protein in controlling cholesterol
PT metabolism, used to diagnose and treat inflammatory diseases or
```

PT infections.
PS Disclosure; Page 174; 186pp; Japanese.
XX
CC The invention comprises a method for screening for compounds that are
CC capable of changing the binding properties of a G protein-coupled
CC receptor protein. The method of the invention is useful for screening
CC agonists or antagonists to alter binding properties of novel G protein-
CC coupled receptor proteins in controlling cholesterol metabolism. The
CC method of the invention is useful in the diagnosis and treatment of
CC inflammatory diseases, excessive immune reaction after transplantation,
CC immune insufficiency and infections. The present DNA sequence represents
CC a TNF alpha PCR primer
XX
SQ Sequence 19 BP; 2 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 7.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 676 AAGCTCAGACCAACC 691
|||||
DB 17 AAGCTCAGGACAACC 2

RESULT 772
AD014642
ID AD014642 standard; RNA; 19 BP.
AC AD014642;
XX
XX
DT 01-JUL-2004 (first entry)
DE Human PDGFr-targeted siNA upper strand SEQ ID NO:73.
XX
KW cytostatic; vasotropic; nephrotropic; cerebroprotective;
KW treating leukaemia; solid tumors; restenosis; polycystic kidney disease;
KW bronchiolitis; glomerulonephritis; stroke; RNA interference;
KW short interfering nucleic acid; siNA; short interfering RNA; siRNA;
KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
KW expression modulation; gene therapy; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; human;
KW platelet derived growth factor receptor; PDGFr; ss.
XX
XX Homo sapiens.
XX
XX WO2003072704-A2.
XX
XX 04-SEP-2003.
XX
XX 05-FEB-2003; 2003WO-US003473.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Chowrira B;
XX
XX WPI; 2003-731605/69.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of tumors, downregulates expression of the platelet-derived
XX growth factor receptor gene.
XX
XX Example 3; SEQ ID NO 73; 148pp; English.

CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human platelet-derived growth factor
CC receptor (PDGFr) gene by RNA interference. The siNAs may or may not
CC comprise ribonucleotides and may be double or single stranded. They
CC further comprise sense and antisense regions, or alternatively are
CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
CC Specifically, the siNAs include short interfering RNA (siRNA), double-
CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
CC can be unmodified or chemically modified, can contain
CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
CC vector or enzymatically synthesised. The invention also relates to kits
CC for the in vitro or in vivo delivery of siRNA; conjugates and/or
CC complexes of siRNA; and vectors that express siNA. The siNAs are used to
CC modulate expression of the PDGFr gene in cells, tissue explants or
CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
CC for the treatment of a variety of conditions. They may be used for
CC treating leukaemia and solid tumors, restenosis, polycystic kidney
CC disease, bronchiolitis, glomerulonephritis and stroke. The siNAs are also
CC useful for drug screening, diagnosis, therapeutic target identification
CC and validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the upper strand of a human PDGFr-
CC targeted double-stranded siNA, which is identical to the PDGFr transcript
CC target sequence.
XX
XX
SQ Sequence 19 BP; 2 A; 5 C; 8 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 75.0%; Pred. No. 7.7e+02;
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 270 ACGTCTCTCTCTGGG 285
|||||
DB 2 ACGUCGCGCUCUGGG 17

RESULT 773
AD014953/c
ID AD014953 standard; RNA; 19 BP.
XX
XX AC AD014953;
XX
XX DT 01-JUL-2004 (first entry)
XX
XX DE Human PDGFr-targeted siNA lower strand SEQ ID NO:384.
XX
XX KW cytostatic; vasotropic; nephrotropic; cerebroprotective;
KW treating leukaemia; solid tumors; restenosis; polycystic kidney disease;
KW bronchiolitis; glomerulonephritis; stroke; RNA interference;
KW short interfering nucleic acid; siNA; short interfering RNA; siRNA;
KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
KW expression modulation; gene therapy; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; human;
KW platelet derived growth factor receptor; PDGFr; ss.
XX
XX Homo sapiens.
XX
XX WO2003072704-A2.
XX
XX 04-SEP-2003.
XX
XX 05-FEB-2003; 2003WO-US003473.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L, Chowrira B;
 PI WPI; 2003-731605/69.
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of tumors, downregulates expression of the platelet-derived
 PT growth factor receptor gene.
 XX
 XX Example 3; SEQ ID NO 384; 148pp; English.
 XX
 CC The invention relates to short interfering nucleic acids (siNA) which
 CC downregulate expression of the human platelet-derived growth factor
 CC receptor (PDGFR) gene by RNA interference. The siNAs may or may not
 CC comprise ribonucleotides and may be double or single stranded. They
 CC further comprise sense and antisense regions, or alternatively are
 CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
 CC Specifically, the siNAs include short interfering RNA (siRNA, double-
 CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
 CC can be unmodified or chemically modified, can contain
 CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
 CC vector or enzymatically synthesised. The invention also relates to kits
 CC for the in vitro or in vivo delivery of siRNA; conjugates and/or
 CC complexes of siRNA; and vectors that express siNA. The siNAs are used to
 CC modulate expression of the PDGFR gene in cells, tissue explants or
 CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
 CC for the treatment of a variety of conditions. They may be used for
 CC treating leukaemia and solid tumours, restenosis, polycystic kidney
 CC disease, bronchiolitis, glomerulonephritis and stroke. The siNAs are also
 CC useful for drug screening, diagnosis, therapeutic target identification
 CC and validation, genetic engineering, pharmacogenomics, studying gene
 CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
 CC The present sequence represents the lower strand of a human PDGFR-
 CC targeted double-stranded siNA, which is identical to the PDGFR transcript
 CC target sequence.
 XX
 SQ Sequence 19 BP; 4 A; 8 C; 5 G; 0 T; 2 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 93.8%; Pred. No. 7.7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 270 ACCTGCTGCTCCTGGG 285
 Db 18 ACCTGCGGCTCCTGGG 3
 RESULT 774
 ADP67060/C
 ID ADP67060 standard; DNA; 19 BP.
 XX
 AC ADP67060;
 XX
 DT 12-AUG-2004 (first entry)
 XX
 DE TNF-alpha mRNA quantifying primer.
 XX
 KW TGR5; GLP-1; glucagon-like peptide-1; G protein coupled receptor;
 KW antidiabetic; anorectic; anabolic; eating-disorder; immunosuppressive;
 KW GPCR; PCR; primer; ss; tumour necrosis factor alpha; TNF alpha.
 XX
 OS Synthetic.
 XX
 PN WO2004043468-A1.
 XX
 PD 27-MAY-2004.
 XX
 XX 11-NOV-2003; 2003WO-JP014292.
 PF
 XX 12-NOV-2002; 2002JP-00328581.
 PR
 XX 28-MAR-2003; 2003JP-00092033.
 PR
 XX 13-JUN-2003; 2003JP-00168617.
 XX

PA (TAKE) TAKEDA CHEM IND LTD.
 XX Hinuma S, Fujii R, Kawamata Y, Komatsu H, Uejima H, Itoh F;
 XX WPI; 2004-440561/41.
 XX
 XX Screening agonist or antagonist of receptor protein or glucagon like
 PT peptide-1 secretion inhibitor, by using G protein coupled receptor and
 PT compound capable of altering binding property of cholesterol metabolism
 PT related substance.
 XX
 XX Example 11; SEQ ID NO 34; 274pp; Japanese.
 XX
 CC The invention relates to screening agonist or antagonist of receptor
 CC protein or glucagon-like peptide-1 (GLP-1) secretagogue or GLP-1
 CC secretion inhibitor, by using G protein coupled receptor TGR5. The TGR5
 CC is derived from human, mouse, rat, cow, rabbit or guinea pig. The
 CC compound is an inhibitor of cytokine production. The compound is a GLP-1
 CC secretion promoter, anorectic agent, pancreas regenerating agent,
 CC pancreatic beta-differentiation or growth promoter. The agonist of GPCR
 CC is useful for producing a GLP-1 secretion promoter, prophylactic and/or
 CC therapeutic agent of diabetes, insulin hyposecretion, pancreatic
 CC exhaustion, obesity, anorexia or regeneration of pancreas. The antagonist
 CC of GPCR having is useful for producing GLP-1 secretion inhibitor and
 CC prophylactic and/or therapeutic agent of hypoglycaemia. TGR containing
 CC the compound is useful as prophylactic or therapeutic agent of
 CC pathological conditions associated with regulation of physiological
 CC function of TGR5. TGR containing the compound is useful as
 CC immunosuppressive agent for suppressing immune reaction after cardiac
 CC failure, myocardial infarction, acute renal failure, angina, arrhythmia,
 CC bronchial asthma, chronic obstructive pulmonary disease,
 CC arteriosclerosis, rheumatoid arthritis, diabetes, gastric ulcer,
 CC ulcerative colitis, allergy, osteoarthritis, lupus erythematosus,
 CC infectious disease or after transplant. Sequences ADP67047-ADP67061
 CC represent PCR primers and probes specific for interleukin (IL)-1 alpha,
 CC IL-1 beta, IL-6, IL-8 and tumour necrosis factor (TNF) alpha, used in the
 CC respective genes mRNA quantification.
 XX
 SQ Sequence 19 BP; 2 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 93.8%; Pred. No. 7.7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 676 AAGCTCACAGACAACC 691
 Db 17 AAGCTCAGGACAACC 2
 RESULT 775
 ADP27088
 ID ADP27088 standard; DNA; 19 BP.
 XX
 AC ADP27088;
 XX
 DT 26-AUG-2004 (first entry)
 XX
 DE Rat matrix metalloproteinase 11 (MMP11) DNA probe.
 XX
 XX Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide;
 KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
 KW 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic; probe.
 XX
 OS Rattus norvegicus.
 XX
 PN US2004110152-A1.
 XX
 PD 10-JUN-2004.
 XX
 XX 10-DEC-2002; 2002US-00316755.
 PF
 XX 10-DEC-2002; 2002US-00316755.
 PR
 XX

```
PA (ISIS-) ISIS PHARM INC.
XX Baker BF, Cowser LM;
XX WPI; 2004-440341/41.
DR
XX New oligonucleotide compound that inhibits expression of matrix
PT metalloproteinase 11, useful for preparing a composition for treating
PT hyperproliferative disorder, e.g., cancer.
XX
XX Example 13; SEQ ID NO 14; 76pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound
CC is an antisense oligonucleotide that specifically hybridises with the
CC nucleic acid and inhibits expression of the polypeptide. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage
CC i.e. a phosphorothioate linkage, at least one modified sugar moiety,
CC preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
CC nucleobase comprising a 5-methylcytosine. The antisense compounds are
CC useful for modulating the expression of the MMP11 polypeptide and in
CC preparation of a composition for treating hyperproliferative disorders,
CC e.g. cancer. This sequence represents a probe which hybridises to DNA
CC encoding the rat MMP11 polypeptide of the invention.
XX
XX Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 7.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1721 GCCATGTTCACTGCC 1736
Db ||||| ||||| |||||
3 GCCATGGTCACTGCC 18

RESULT 776
AAQ30930/C
ID AAQ30930 standard; DNA; 20 BP.
XX
AC AAQ30930;
XX
XX 23-MAR-1993 (first entry)
XX
XX tdh 4.
XX
XX Vibrio parahaemolyticus; thermostable direct; haemolysin-related;
KW haemolysin gene; type 2; type 1; V.p; polymerase chain reaction; PCR;
KW primer; detection; ss.
XX
XX Synthetic.
XX
XX JP04293486-A.
XX
XX 19-OCT-1992.
XX
XX 25-MAR-1991; 91JP-00059820.
XX
XX 25-MAR-1991; 91JP-00059820.
XX
XX (SHWA ) SHIMADZU CORP.
XX
XX WPI; 1992-394404/48.
XX
XX Oligo-nucleotide for detecting microbe with high sensitivity and
PT selectivity - more specifically for targeting a nucleotide sequence
PT coding a thermostable direct haemolysin-related haemolysin gene type 1
PT and type 2.
XX
XX Claim 2; Page 2; 24pp; Japanese.
XX
XX The sequences give in AAQ30925-32 are oligonucleotides which target
CC sequences in Vibrio parahaemolyticus (V.p) which encode thermostable

CC direct hemolysin-related hemolysin gene type 1 and type 2. These
CC sequences can also be used to detect V.p by acting as polymerase chain
CC reaction primers. These oligos allow highly sensitive detection of V.p
XX
XX Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 224 ATGAGAGTGGTGGTGG 239
Db ||||| ||||| |||||
16 ATGAGAGTGGTAGTGG 1

RESULT 777
AAQ42491/C
ID AAQ42491 standard; DNA; 20 BP.
XX
AC AAQ42491;
XX
XX 07-OCT-1993 (first entry)
XX
XX PCR primer-b to amplify Vibrio parahaemolyticus WPI DNA.
XX
XX Polymerase chain reaction; amplification detection assay; ss.
XX
XX Synthetic.
XX
XX JP05111398-A.
XX
XX 07-MAY-1993.
XX
XX 24-OCT-1991; 91JP-00277775.
XX
XX 24-OCT-1991; 91JP-00277775.
XX
XX (SHWA ) SHIMADZU CORP.
XX
XX WPI; 1993-184818/23.
XX
XX Detection of nucleic acid - involves amplifying using DNA synthetase and
PT labelled oligo:nucleotide, modifying etc. avoiding electrophoresis.
XX
XX Example 1; Page 3; 5pp; Japanese.
XX
XX Labelled primers-a and -b (AAQ42490 and AAQ42491, respectively) were used
CC to amplify sample DNA from Vibrio parahaemolyticus WPI. Primer-a is
CC specific to the tdh gene. A third oligonucleotide (AAQ42492) was added to
CC the denatured PCR product, allowed to anneal and the annealed product was
CC added to a solid substrate. The target sequence was detected by measuring
CC absorbance at 492nm, without the need for electrophoresis
XX
XX Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 224 ATGAGAGTGGTGGTGG 239
Db ||||| ||||| |||||
16 ATGAGAGTGGTAGTGG 1

RESULT 778
AAQ48094/C
ID AAQ48094 standard; DNA; 20 BP.
XX
AC AAQ48094;
XX
XX 25-MAR-2003 (revised)
XX
XX 10-FEB-1994 (first entry)
XX
```

DE Vibrio parahaemolyticus tdh gene PCR primer (f).

XX Thermostable direct haemolysin gene; tdh; bacterial detection;
 KW nucleic acid amplification; polymerase chain reaction; PCR;
 KW food poisoning; ss.

XX Synthetic.

XX OS
 XX EP556504-A2.

XX 25-AUG-1993.

XX 20-AUG-1992; 92EP-00307606.

XX 18-FEB-1992; 92JP-00030755.

XX 24-MAR-1992; 92JP-0006082.

XX (SHMA) SHIMADZU CORP.

XX Ohashi T, Tada J, Fukushima S, Ozaki H, Nishimura N, Shirasaki Y;
 PI Yamagata X;

XX WPI; 1993-265932/34.

XX Oligo:nucleotide(s) specific for Vibrio parahaemolyticus, E.coli or
 PT S.aureus - used as primers or probes partic. for detecting food poisoning
 PT and in food inspection.

XX Claim 2; Page 119; 122pp; English.

XX Oligonucleotides AAQ48091-Q48094 (designated primers c, d, e and f,
 CC respectively) are complementary to a target sequence from the tdh gene
 CC from V.parahaemolyticus. They are used as PCR primers in the following
 CC pairs: c/d, e/d, e/f to specifically amplify fragments of 373, 199 or
 CC 251bp, respectively, from the tdh gene. (Updated on 25-MAR-2003 to
 CC correct PN field.)

XX Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 8.1e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 224 ATGAGAGTGGTGGTGG 239

Db 16 ATGAGAGTGGTAGTGG 1

RESULT 779

AAQ46093/c

ID AAQ46093 standard; DNA; 20 BP.

XX AAQ46093;

XX 15-FEB-1994 (first entry)

XX Oligonucleotide used for production of probe for tdh gene.

XX Probe; enzyme labelling; transglutaminase; ss.

XX Vibrio parahaemolyticus.

XX JP05192149-A.

XX 03-AUG-1993.

XX 24-OCT-1991; 91JP-00277754.

XX 24-OCT-1991; 91JP-00277754.

XX (SHMA) SHIMADZU CORP.

XX WPI; 1993-277466/35.

XX Prepn. of DNA probe - by introducing amino gp. at 5'-terminal of DNA,
 PT then bonding labelling substance to DNA using transglutaminase.
 XX Disclosure; Page 3; 5pp; Japanese.

XX The DNA probe is prepared by introducing an amino group at the 5',
 CC terminus of DNA or a nucleotide, followed by using transglutaminase to
 CC bond a labelling substance to the obtained DNA having the introduced
 CC amino group. The enzymatic reaction using transglutaminase is advantageous
 CC in time and cost since many chemical reaction stages associated with
 CC e.g. radiolabelling of probes can be by-passed. The enzymatic reaction is
 CC mild, decrease of activity of the labelled compound can be minimised and
 CC producibility is increased

XX Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 8.1e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 224 ATGAGAGTGGTGGTGG 239

Db 16 ATGAGAGTGGTAGTGG 1

RESULT 780

AAQ46096/c

ID AAQ46096 standard; DNA; 20 BP.

XX AAQ46096;

XX 15-FEB-1994 (first entry)

XX PCR primer used for amplifying Vibrio parahaemolyticus tdh gene.

XX Probe; enzyme labelling; transglutaminase; ss.

XX Synthetic.

XX JP05192149-A.

XX 03-AUG-1993.

XX 24-OCT-1991; 91JP-00277754.

XX 24-OCT-1991; 91JP-00277754.

XX (SHMA) SHIMADZU CORP.

XX WPI; 1993-277466/35.

XX Prepn. of DNA probe - by introducing amino gp. at 5'-terminal of DNA,
 PT then bonding labelling substance to DNA using transglutaminase.

XX Disclosure; Page 3; 5pp; Japanese.

XX The DNA probe is prepared by introducing an amino group at the 5',
 CC terminus of DNA or a nucleotide, followed by using transglutaminase to
 CC bond a labelling substance to the obtained DNA having the introduced
 CC amino group. The enzymatic reaction using transglutaminase is advantageous
 CC in time and cost since many chemical reaction stages associated with
 CC e.g. radiolabelling of probes can be by-passed. The enzymatic reaction is
 CC mild, decrease of activity of the labelled compound can be minimised and
 CC producibility is increased. Two PCR primers (AAQ46095, AAQ46096) were
 CC used to amplify DNA samples prepared from Vibrio Parahaemolyticus WPI
 CC strain

XX Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 8.1e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      224  ATGAGAGTGGTGGTGG 239
Db      16  ATGAGAGTGGTAGTGG 1

RESULT 781
AAQ68498/c
ID  AAQ68498 standard; DNA; 20 BP.
XX
AC  AAQ68498;
XX
DT  27-FEB-1995 (first entry)
XX
DE  Vibrio parahaemolyticus DNA primer.
XX
KW  Vibrio parahaemolyticus; Vibrio cholerae; detection; amplification;
KW  primer; polymerase chain reaction; PCR; ss.
XX
OS  Synthetic.
XX
PN  JP06165698-A.
XX
PD  14-JUN-1994.
XX
PF  16-JUL-1993; 93JP-00176749.
XX
PR  30-SEP-1992; 92JP-00261899.
XX
PA  (SHMA ) SHIMADZU CORP.
XX
DR  WPI; 1994-230239/28.
XX
PT  Detection of nucleic acid - using polymerase chain reaction and solid
PT  phase recognition.
XX
PS  Claim 3; Page 2; 9pp; Japanese.
XX
CC  The primers given in AAQ68497-500 are used in the detection of V.
CC  parahaemolyticus DNA. The primers given in AAQ68501-503 are used in the
CC  detection of V. cholerae DNA
XX
SQ  Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;

Query Match      0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      224  ATGAGAGTGGTGGTGG 239
Db      16  ATGAGAGTGGTAGTGG 1

RESULT 782
AAQ60442
ID  AAT60442 standard; DNA; 20 BP.
XX
AC  AAT60442;
XX
DT  09-JUL-1997 (first entry)
XX
DE  Tyrosine kinase Tnkl primer A.
XX
KW  Tyrosine kinase; Tnkl; signal transduction; cell transformation;
KW  cell proliferation; haematopoietic cell; bone marrow; cancer;
KW  gene therapy; diagnosis; polymerase chain reaction; PCR; primer;
KW  rapid amplification of cDNA ends; 5' RACE; ss.
XX
OS  Synthetic.
XX
PN  WO9713846-A1.
XX
PD  17-APR-1997.

```

```

XX      11-OCT-1996; 96WO-US016359.
XX
PR      12-OCT-1995; 95US-0005286P.
XX
PA      (UYJO ) UNIV JOHNS HOPKINS.
XX
PI      Civin CI, Small D, Hoehn GT;
XX
DR      WPI; 1997-235882/21.
XX
PT      Tnkl intracellular tyrosine kinase and its splice variant - useful in
PT      gene therapy to inhibit cell transformation, stimulate haematopoietic
PT      cells etc. and for diagnosis.
XX
PS      Example 1; Page 34; 69pp; English.
XX
CC      PCR primers (AAT60438-43) were used in 5'RACE and 3'RACE amplifications
CC      of K562 cell cDNA in order to isolate full-length clones for the novel
CC      human intracellular tyrosine kinase Tnkl (AAT60433) and for its splice
CC      variant Tnkl-alpha (AAT60434). Primer A (AAT60442) is specific for Tnkl
CC      and was used to identify tnnk1 sequences in 5'RACE products cloned into
CC      vector TA
XX
SQ      Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match      0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1022  TCAAGCTGGCTGACTT 1037
Db      4  TCAAGCTGGCTGACTT 19

RESULT 783
AAT85490/c
ID  AAT85490 standard; cDNA; 20 BP.
XX
AC  AAT85490;
XX
DT  17-NOV-1997 (first entry)
XX
DE  Oligo #2 used to isolate hALR cDNA sequence.
XX
KW  Human; netrin; ATPase binding cassette transporter; ribosomal L3;
KW  augmentor of liver regeneration; hNET; hABC3; SEM L3; hALR;
KW  chromosome 16; exon trapping; axon; chicken; laminin domain; C. elegans;
KW  UNC-6; cystic fibrosis; ss.
XX
OS  Synthetic.
XX
PN  WO9702346-A2.
XX
PD  23-JAN-1997.
XX
PF  17-JUN-1996; 96WO-US010469.
XX
PR  30-JUN-1995; 95US-0000596P.
XX
PA  (GENZ ) GENZYME CORP.
XX
PI  Landes GM, Burn TC, Connors TD, Dackowski WR, Klinger KW;
PI  Van Raay TJ;
XX
DR  WPI; 1997-108959/10.
XX
PT  New isolated human chromosome 16 genes - encode netrin, ATPase binding
PT  cassette transporter, ribosomal L3 sub-type or augmentor of liver
PT  regeneration.
XX
PS  Claim 72; Page 66; 98pp; English.

```

CC The sequences given in AAT85489-90 are oligos which hybridise under
 CC stringent conditions to the cDNA encoding the human augments of liver
 CC regeneration protein (hALR). The hALR genomic sequence was isolated from
 CC human chromosome 16 by exon trapping. hALR cDNA encodes a 119 amino acid
 CC protein which is 94.8% identical and 94.1% similar to the rat ALR
 CC protein. The hALR gene is specifically isolated from the chromosome
 CC region 16p13.3

XX Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 8.1e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1657 CACACCCCTCACAGGG 1672

||||| ||||| ||||| |||||

20 CACACTCCTCACAGGG 5

RESULT 784

AAT92765

ID AAT92765 standard; DNA; 20 BP.

XX AC AAT92765;

XX DT 05-FEB-1998 (first entry)

XX Primer #2 for immunoglobulin kappa variable region Vkappa1-2.

DE PCR primer; amplify; human gene; chimeric non-human animal; antibody;

XX transgenic mouse; chromosome fragment; hybridoma production; microcell;

KW Huntington's disease gene; pluripotent cell; interleukin-2 gene;

KW myeloma cell; immunoglobulin; variable region; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9707671-A1.

XX 06-MAR-1997.

XX 29-AUG-1996; 96WO-JP002427.

XX 29-AUG-1995; 95JP-00242340.

XX 15-FEB-1996; 96JP-00027940.

XX (KIRI) KIRIN BEER KK.

XX Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;

XX WPI; 1997-178822/16.

XX Chimeric animal containing foreign chromosome - for expression of a

PT foreign gene, e.g. an antibody.

XX Example 1; Page 21; 142pp; Japanese.

XX AAT92758-T92817 represent amplification primers for human genes which are

CC used in the chimeric non-human animal of the invention. The chimeric non-

CC human animal of the invention, preferably a mouse, contains a foreign

CC chromosome(s) or chromosome fragment. The animal is produced by obtaining

CC a hybrid cell by fusion of a cell containing the foreign chromosome with

CC a cell having the ability to form microcells. The microcells are

CC prepared, and fused with cells having differentiative pluripotency to

CC form cells having differentiative pluripotency and containing the foreign

CC chromosome. These cells are then introduced into an embryo, which is then

CC implanted and brought to term. The foreign chromosome segment is at least

CC 1 Mb long and preferably contains a region for an antibody. The

CC chromosome segment could also contain genes associated with human

CC disease, such as the interleukin-2 gene, and the Huntington's disease

CC gene. The expression of foreign genes (especially human genes) in a non-

CC human animal is useful for efficient production of proteins, especially

CC of human antibodies. Particular cells of the chimeric animal which

CC express the foreign genetic material can be isolated and fused with
 CC myeloma cells to produce hybridomas capable of expressing the foreign
 CC gene (e.g. to produce the antibody)

SQ Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 8.1e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 356 CTGATGGGAGAGTGA 371

||||| ||||| ||||| |||||

5 CTGATGGTGGAGAGTGA 20

RESULT 785

AAX10122/c

ID AAX10122 standard; DNA; 20 BP.

XX AC AAX10122;

XX DT 24-MAR-1999 (first entry)

XX Human biallelic polymorphic marker downstream primer #428.

DE Polymorphism; biallelic; human; forensic; paternity testing; disease;

KW detection; phenotypic typing; characteristic; infection; hereditary;

KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;

KW treatment; marker; primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9820165-A2.

XX 14-MAY-1998.

XX 05-NOV-1997; 97WO-US020313.

XX 06-NOV-1996; 96US-0030455P.

XX (WHED) WHITEHEAD INST BIOMEDICAL RES.

XX Lander ES, Wang D, Hudson T;

XX WPI; 1998-286974/25.

XX New isolated nucleic acid segments from the human genome - used for

PT determining polymorphic forms for use in e.g. forensics, paternity

PT testing or phenotypic typing for disease.

XX Claim 16; Page 202; 310pp; English.

XX AAX09121-X10268 are allele-specific oligonucleotide primers used in the

CC isolation of various biallelic polymorphic markers found in the human

CC genome (represented in AAX10269-X12937). These primers can be used in a

CC method for determining polymorphic forms in an individual for use in e.g.

CC forensics, paternity testing or for phenotypic typing for diseases such

CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular

CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial

CC hypercholesterolemia, polycystic kidney disease, hereditary

CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary

CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos

CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,

CC autoimmune diseases, inflammation, cancer, diseases of the nervous

CC system, infection by pathogenic microorganisms, and characteristics such

CC as longevity, appearance (e.g. baldness, obesity), strength, speed,

CC endurance, fertility, and susceptibility or receptivity to particular

CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid

CC segments can also be used to produce medicaments for the treatment or

CC prophylaxis of such diseases

XX Sequence 20 BP; 3 A; 5 C; 3 G; 9 T; 0 U; 0 Other;


```

Query Match          0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 665 AAGCAAAAGCAAGCT 680
Db 20 AAGCAAAAGCAAGAT 5
|||||

RESULT 786
AAV16342/c
ID AAV16342 standard; DNA; 20 BP.
XX
AC AAV16342;
XX
DT 03-JUN-1998 (first entry)
XX
DE 3' RACE internal PCR primer used to clone the human ALR gene.
XX
KW Human; augmenter of liver regeneration; hALR; treatment; modulation;
KW expression; antibody; identification; binding; substrate specificity;
KW ligand; exon trap; damaged liver; treatment; PCR primer; amplify; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9748797-A1.
XX
PD 24-DEC-1997.
XX
PF 16-JAN-1997; 97WO-US000785.
XX
PR 17-JUN-1996; 96US-00665259.
PR 01-OCT-1996; 96US-00720614.
PR 09-DEC-1996; 96US-00762500.
XX
PA (GENZ ) GENZYME CORP.
XX
PI Landes GM, Burn TC, Connors TD, Dackowski WR, Van Raay TJ;
PI Klingner KW;
XX
DR WPI; 1998-063138/06.
XX
PT Human chromosome 16 genes encoding netrin, ATP binding cassette
PT transporter, ribosomal L3 and augmenter of liver regeneration proteins -
PT useful for, e.g. treatment of liver disease and cystic fibrosis.
XX
PS Claim 80; Page 69; 220pp; English.
XX
CC Oligonucleotides AAV16341-42 are used to clone the human augmenter of
CC liver regeneration (hALR) gene (see AAV16309). ALR is a growth factor
CC which augments the growth of damaged liver tissue while having no effect
CC on the resting liver. Rat ALR has been shown to be capable of augmenting
CC hepatocytic regeneration following hepatectomy. The antisense
CC oligonucleotides of the present sequence are used to modulate expression
CC of hALR and prevent its translation. Antibodies against hALR can be used
CC to block binding of its naturally occurring ligands. Host cells
CC containing vectors with DNA inserts encoding the protein can be used in a
CC method for identifying compounds which bind to hALR. hALR could be used
CC in the treatment of damaged liver
XX
SQ Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match          0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1657 CACACCCCTCACAGG 1672
Db 20 CACACTCTCTCACAGG 5
|||||

Query Match          0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1657 CACACCCCTCACAGG 1672
Db 20 CACACTCTCTCACAGG 5
|||||

```

```

RESULT 787
AAV29622
ID AAV29622 standard; DNA; 20 BP.
XX
AC AAV29622;
XX
DT 19-AUG-1998 (first entry)
XX
DE Human EP3 receptor cDNA amplifying primer 1.
XX
KW Prostaglandin E2 receptor; EP3-V receptor; human; treatment;
KW inflammation; EP3-VI; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN JPI0113185-A.
XX
PD 06-MAY-1998.
XX
PF 14-OCT-1996; 96JP-00291150.
XX
PR 14-OCT-1996; 96JP-00291150.
XX
PA (ONOY ) ONO PHARM CO LTD.
XX
DR WPI; 1998-315474/28.
XX
PT New human prostaglandin EP3 receptor(s) - useful for treatment and
PT prevention of, e.g. inflammation.
XX
PS Example; Page 7; 27pp; Japanese.
XX
CC This primer is used for the PCR amplification of the human EP3-V and EP3-
CC VI receptor cDNA sequences. A replication or expression vector comprising
CC cDNA sequences encoding EP-3V or EP3-3VI can be used to transform a host
CC cell. The host cell is cultured and the polypeptides can be recovered
CC from the culture medium. The polypeptides combine specifically with a
CC prostaglandin PGE2 receptor and can be used as a preventive and treating
CC agent for inflammation
XX
SQ Sequence 20 BP; 5 A; 2 C; 10 G; 3 T; 0 U; 0 Other;

Query Match          0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 347 AGATGGGGCTCTGATGG 362
Db 2 AGATGGGGCTCTGATGG 17
|||||

RESULT 788
AAV52762
ID AAV52762 standard; DNA; 20 BP.
XX
AC AAV52762;
XX
DT 27-NOV-1998 (first entry)
XX
DE Immunoglobulin kappa variable PCR primer VK1-2 #2.
XX
KW Pluripotent cell; intrinsic gene; chimeric non-human animal;
KW construction; human; antibiotic gene; cancer cell; embryonic; PCR primer;
KW ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9837757-A1.
XX
PD 03-SEP-1998.
XX

```

PF 02-MAR-1998; 98WO-JP000860.
XX
XX 28-FEB-1997; 97JP-00062309.
XX
XX (KIRI) KIRIN BEER KK.
XX
XX Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;
XX
XX WPI; 1998-480821/41.
XX
XX Pluripotent cells containing foreign chromosomes or fragments - and non-
PT human chimeric animals constructed using them and expressing foreign
PT genes such as human antibiotic genes.
XX
XX Example 1; Page 34; 217pp; Japanese.
XX
XX The present invention describes a method of obtaining pluripotent cells
CC containing foreign chromosomes or their fragments (preferably at least
CC 670 kb in length, especially more than 1000 kb) by preparing cancerous
CC cells containing the foreign chromosomes or fragments, then fusing these
CC with pluripotent cells such as embryonic stem cells, embryonic
CC reproductive cells, embryonic cancer cells or their mutants. Also
CC described are: (1) a method of obtaining hybridoma cells by fusing a cell
CC with a high ability to produce hybridoma cells (such as mouse A9 cells)
CC with a cell containing the foreign chromosomes or fragments (such as
CC normal human diploid cells); (2) a method of utilising pluripotent cells
CC to produce chimeric and transgenic non-human animals (especially mammals
CC such as mice) which can express the foreign chromosomes or fragments
CC introduced; and (3) chimeric animals, their offspring and tissues and
CC cells derived from the offspring produced by a method as in (2). The
CC inventions can be used for the production of monoclonal antibodies for
CC medical use which are of human type and therefore not antigenic in
CC humans. They can also be used in the production of chimeric and
CC transgenic animals which express useful foreign proteins, or which can
CC serve as models for the study of human diseases. AAV52755 to AAV52828 are
XX PCR primers used in examples from the present invention
XX
SQ Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 356 CTGATGGGGAGAGTGA 371
Db ||||| ||||| ||||| ||||| |||||
5 CTGATGGTGAGAGTGA 20

RESULT 789
AAAX29918/C
ID AAX29918 standard; DNA; 20 BP.
XX
XX AAX29918;
AC
XX 06-JUL-1999 (first entry)
DT
XX
XX Primer 1192-1161 for PDZ domain-containing protein genes.
DE
XX
XX PDZ domain; gene expression; human umbilical vascular endothelial cell;
KW HUVEC; stimulation; tumour necrosis factor; TNF; protein binding; PCR;
KW cell; proliferation disorder; cancer; primer; amplification; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
OS
XX WO9907846-A1.
PN
XX 18-FEB-1999.
PD
XX
XX 12-AUG-1998; 98WO-JP003603.
PF
XX
XX 12-AUG-1997; 97JP-00230356.
PR 19-JUN-1998; 98JP-00189944.
XX
XX (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
PA Funabashi S, Miyata S;
XX
XX WPI; 1999-167423/14.
XX
XX Protein containing PDZ domain, whose expression is enhanced by TNF
PT stimulation - plays an important role in protein/protein interactions and
PT is used for screening for proteins for use in treatment of cell
PT proliferation disorders such as cancer.
XX
XX Example 2; Page 31; 240pp; Japanese.
XX
XX This sequence represents a primer used to isolate the clone 32-8-1/5R3

XX
PA (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
XX
XX Funabashi S, Miyata S;
XX
XX WPI; 1999-167423/14.
XX
XX Protein containing PDZ domain, whose expression is enhanced by TNF
PT stimulation - plays an important role in protein/protein interactions and
PT is used for screening for proteins for use in treatment of cell
PT proliferation disorders such as cancer.
XX
XX Example 2; Page 29; 240pp; Japanese.
XX
XX This sequence represents a primer use to amplify and isolate clones which
CC encode new proteins containing PDZ domains whose expression in human
CC umbilical vascular endothelial cells (HUVEC) are enhanced by stimulation
CC with tumour necrosis factor (TNF) alpha. The new protein is used to
CC identify proteins which bind to it (particularly to the PDZ domains) and
CC the genes encoding them, for use in the treatment of cell proliferation
CC disorders such as cancer
XX
SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 880 GACTGTGGGACATCA 895
Db ||||| ||||| ||||| ||||| |||||
18 GACTGTGGGACATCA 3

RESULT 790
AAAX29949/C
ID AAX29949 standard; DNA; 20 BP.
XX
XX AAX29949;
AC
XX 06-JUL-1999 (first entry)
DT
XX
XX Primer 1192-1161 for PDZ domain-containing protein gene clone 32-8-1/5R3.
DE
XX
XX PDZ domain; gene expression; human umbilical vascular endothelial cell;
KW HUVEC; stimulation; tumour necrosis factor; TNF; protein binding; PCR;
KW cell; proliferation disorder; cancer; primer; amplification; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
OS
XX WO9907846-A1.
PN
XX 18-FEB-1999.
PD
XX
XX 12-AUG-1998; 98WO-JP003603.
PF
XX
XX 12-AUG-1997; 97JP-00230356.
PR 19-JUN-1998; 98JP-00189944.
XX
XX (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
PA Funabashi S, Miyata S;
XX
XX WPI; 1999-167423/14.
XX
XX Protein containing PDZ domain, whose expression is enhanced by TNF
PT stimulation - plays an important role in protein/protein interactions and
PT is used for screening for proteins for use in treatment of cell
PT proliferation disorders such as cancer.
XX
XX Example 2; Page 31; 240pp; Japanese.
XX
XX This sequence represents a primer used to isolate the clone 32-8-1/5R3

CC which encodes a new protein containing PDZ domains whose expression in
CC human umbilical vascular endothelial cells (HUVEC) is enhanced by
CC stimulation with tumor necrosis factor (TNF) alpha. The new protein is
CC used to identify proteins which bind to it (particularly to the PDZ
CC domains) and the genes encoding them, for use in the treatment of cell
CC proliferation disorders such as cancer
XX
SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 880 GACTGTGGGAACATCA 895
Db 18 GACTGTGGGACCATCA 3

RESULT 791
AAA79747/c
ID AAA79747 standard; DNA; 20 BP.

XX
AC AAA79747;

XX
DT 20-NOV-2000 (first entry)

XX
DE Hepatitis B virus related oligonucleotide probe #10.

XX
KW Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;
XX mutation; high-density gene chip; ss.

OS Hepatitis B virus.

XX
PN CN1252452-A.

XX
PD 10-MAY-2000.

XX
PF 24-SEP-1999; 99CN-00114460.

XX
PR 24-SEP-1999; 99CN-00114460.

XX
PA (UYDO-) UNIV DONGNAN.

XX
PI Sun X, Lu Z, Wang Y;

XX
DR WPI; 2000-443233/39.

XX
PT High-density gene chip making process.

XX
PS Example 1; Fig 15; 19pp; Chinese.

CC The present invention describes a method which comprises making a high-
CC density gene chip, specifically for making high-density micro-array of
CC oligonucleotide probes. An oligonucleotide probe selecting process to
CC seek preferentially length variable and coverage variable probes is
CC provided to ensure identical cross melting temperature of probes to the
CC maximum limit, and this can make the cross control of gene chip
CC relatively simple and raise the reliability of the gene chip detecting
CC results. The process proposes a specific probe selection method for
CC detecting target sequence directly, detecting mutation in both specific
CC and non-specific sites and a probe overall arrangement scheme. AAA79738
CC to AAA80201 represent oligonucleotide probe sequences which are used in
CC examples from the present invention
XX

SQ Sequence 20 BP; 8 A; 1 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 828 CCTCACCCCTGTCTTT 843
Db 18 CCTACCCCTGTCTTT 3

RESULT 792
AAA09925
ID AAA09925 standard; DNA; 20 BP.

XX
AC AAA09925;

XX
DT 05-JUL-2000 (first entry)

XX
DE Primer 2 for human immunoglobulin kappa variable region gene Vk1-2.

XX
KW Foreign chromosome; microcell fusion; homologous recombination; antibody;
XX targeting vector; transgenic animal; disease model; knockout animal;
XX PCR primer; human; ss.

OS Homo sapiens.

XX
PN WO200010383-A1.

XX
PD 02-MAR-2000.

XX
PF 23-AUG-1999; 99WO-JP004518.

XX
PR 21-AUG-1998; 98JP-00236169.

XX
PA (KIRI) KIRIN BEER KK.

XX
PI Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;

XX
PI Kuroiwa Y;

XX
DR WPI; 2000-246479/21.

XX
PT Producing a cell containing modified foreign chromosomes, useful for the
XX generation of transgenic animals.

XX
PS Example 1; Page 55; 316pp; Japanese.

XX
CC The invention relates to a novel method of producing cells containing a
CC modified foreign chromosome or chromosome fragment. The method comprises:
CC (a) fusing a microcell comprising the foreign chromosome or chromosome
CC fragment, with a cell having a high efficiency for homologous
CC recombination; (b) marking the desired site of insertion of the foreign
CC chromosome using a targeting vector; and (c) inducing deletion of the
CC translocation at the marked site. Transgenic animals produced by the
CC method are useful to provide disease models and knockout animals, and in
CC the production of human proteins, particularly human antibodies. This
CC sequence is used in the method of the invention
XX

SQ Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 356 CTGATGGGAGAGTCA 371
Db 5 CTGATGGTGAAGTCA 20

RESULT 793
AAC67141/c
ID AAC67141 standard; DNA; 20 BP.

XX
AC AAC67141;

XX
DT 03-APR-2001 (first entry)

XX
DE Human E2F transcription factor 3 mRNA antisense sequence SEQ ID NO: 14.

XX
KW Human; E2F transcription factor 3; antisense; E2F-3; cancer;
XX phosphorothioate backbone; infection; inflammation; PCR primer; ss.

OS Homo sapiens.
 PN US6165791-A.
 XX
 PD 26-DEC-2000.
 XX
 PF 24-FEB-2000; 2000US-00513729.
 XX
 PR 24-FEB-2000; 2000US-00513729.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Popoff I, Wyatt J;
 XX
 PI WPI; 2001-101698/11.
 DR
 XX
 PT Novel antisense compounds targeted to E2F transcription factor 3 for
 PT diagnosis, prophylaxis and treatment of diseases associated with E2F
 PT transcription factor 3 such as infection, inflammation or tumor
 PT formation.
 XX
 PS Claim 14; Col 41-42; 41pp; English.
 XX
 CC The present invention provides antisense oligonucleotides with
 CC phosphorothioate backbones directed at the human E2F transcription factor
 CC 3 (E2F-3) coding sequences. These can be used in the therapy of diseases
 CC which can be treated by modulating E2F-3 expression and to prevent
 CC infection, inflammation and tumour formation
 CC
 XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 8.1e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 862 CTGAGCAGTACCTGG 877
 |||||
 DB 16 CTGAGCAGTACCTGG 1
 RESULT 794
 AAF58946/C
 ID AAF58946 standard; DNA; 20 BP.
 XX
 AC AAF58946;
 XX
 DT 06-JUN-2001 (first entry)
 XX
 DE V parahaemolyticus detection probe SEQ ID NO: 6.
 XX
 KW Escherichia coli; Vibrio parahaemolyticus; Staphylococcus aureus;
 KW food poisoning; probe; ss.
 XX
 OS Vibrio parahaemolyticus.
 XX
 PN EP1085100-A1.
 XX
 PD 21-MAR-2001.
 XX
 PF 20-AUG-1992; 2000EP-00125531.
 XX
 PR 18-FEB-1992; 92JP-00030755.
 PR 24-MAR-1992; 92JP-00066082.
 PR 20-AUG-1992; 92EP-00307606.
 XX
 XX (SHMA) SHIMADZU CORP.
 PA
 PI Ohashi T, Tada J, Fukushima S, Ozaki H, Nishimura N, Shirasaki Y;
 PI Yamagata K;
 XX
 XX WPI; 2001-246903/26.
 DR
 XX New oligonucleotides that are selectively hybridizable with the heat-

PT labile genes of toxigenic Escherichia coli, useful as primers for gene
 PT amplification to detect E. coli in cases of food poisoning, diarrhea or
 PT in food inspection.
 XX
 XX Example 2; Page 29; 122pp; English.
 XX
 CC The present invention provides a number of oligonucleotides which
 CC selectively hybridise to either Vibrio parahaemolyticus, Escherichia coli
 CC or Staphylococcus aureus genes. These organisms are associated with food
 CC poisoning, and the sequences can be used to determine its cause and thus
 CC determine the appropriate treatment. The present sequence is one of the
 CC probes of the invention
 XX
 SQ Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 8.1e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 224 ATGAGAGTGGTGGTGG 239
 |||||
 DB 16 ATGAGAGTGGTGGTGG 1
 RESULT 795
 AAD17411
 ID AAD17411 standard; DNA; 20 BP.
 XX
 AC AAD17411;
 XX
 DT 29-NOV-2001 (first entry)
 XX
 DE Human sFRP4 gene specific reverse RT-PCR primer.
 XX
 KW Secreted Frizzled-related protein; sFRP; chronic bronchitis; asthma;
 KW chronic obstructive pulmonary disease; COPD; antisense therapy; human;
 KW emphysema; reverse transcription PCR; RT-PCR primer; sFRP4 gene; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200164717-A1.
 XX
 PD 07-SEP-2001.
 XX
 PF 28-FEB-2001; 2001WO-US006579.
 XX
 PR 29-FEB-2000; 2000US-00514885.
 XX
 XX (UYCO) UNIV COLUMBIA NEW YORK.
 PA
 PI D'armiento J, Imai K;
 XX
 XX WPI; 2001-557764/62.
 DR
 XX Inhibition of apoptosis for the treatment or prevention of obstructive
 XX pulmonary disease comprises inhibiting expression of secreted Frizzled-
 XX related protein gene in lung cells.
 XX
 XX Example 2; Page 35; 79pp; English.
 XX
 CC The present sequence is human secreted Frizzled-related protein 4 (sFRP4)
 CC gene specific reverse transcription PCR (RT-PCR) primer. The invention
 CC relates to a method for treating or preventing chronic obstructive
 CC pulmonary disease (COPD) such as emphysema, asthma and chronic bronchitis
 CC in a subject. The method involves administering to the subject, an agent
 CC effective to inhibit apoptosis by inhibiting the expression of a secreted
 CC Frizzled-related protein (sFRP) gene. It is also useful in antisense
 CC therapy
 XX
 SQ Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 8.1e+02;

```
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 335 ACAGGACTTGAAGAT 350
Db | ||||| ||||| |||||
2 ATGAGGACTTGAAGAT 17

RESULT 796
AAF58885/c
ID AAF58888 standard; DNA; 20 BP.
XX AC AAF58888;
XX AC AAF58888;
DT 06-JUN-2001 (first entry)
XX V parahaemolyticus detection probe SEQ ID NO: 6.
XX Escherichia coli; Vibrio parahaemolyticus; Staphylococcus aureus;
KW food poisoning; probe; ss.
KW Vibrio parahaemolyticus.
OS
XX EPI085101-A2.
FN
XX 21-MAR-2001.
PD
XX 20-AUG-1992; 2000EP-00125532.
PF
XX 18-FEB-1992; 92JP-00030755.
PR
XX 24-MAR-1992; 92JP-00066082.
PR
XX 20-AUG-1992; 92EP-00307606.
PR
XX (SHWA ) SHIMADZU CORP.
PA
XX Ohashi T, Tada J, Fukushima S, Ozaki H, Nishimura N, Shirasaki Y;
PI Yamagata K;
PI
XX WPI; 2001-246904/26.
DR
XX New oligonucleotides that are selectively hybridizable with the
PT thermostable enterotoxin genes of enterotoxigenic Escherichia coli,
PT useful as primers for gene amplification to selectively detect E. coli in
PT cases of food poisoning.
XX
XX Example 2; Page 29; 120pp; English.
PS
XX The present invention provides a number of oligonucleotides which
CC selectively hybridise to either Vibrio parahaemolyticus, Escherichia coli
CC or Staphylococcus aureus genes. These organisms are associated with food
CC poisoning, and the sequences can be used to determine its cause and thus
CC determine the appropriate treatment. The present sequence is one of the
CC probes of the invention
XX
SQ Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 224 ATGAGAGTGGTGGTGG 239
Db | ||||| ||||| |||||
16 ATGAGAGTGGTAGTGG 1

RESULT 797
AAH22485
ID AAH22485 standard; DNA; 20 BP.
XX AC AAH22485;
XX AC AAH22485;
DT 22-AUG-2001 (first entry)
XX
XX Rice promoter specific primer SR15.
DE
```

```
XX Transplastome: plastome; plastid; chloroplast; transgene; plant;
KW psbA gene; PCR primer; ss.
XX
XX Oryza sativa.
OS
XX WO200142441-A2.
PN
XX 14-JUN-2001.
PD
XX 08-DEC-2000; 2000WO-EP012446.
PF
XX 08-DEC-1999; 99GB-00029075.
PR
XX 14-JUL-2000; 2000GB-00017369.
PR
XX (ITGE-) INT CENT GENETIC ENG & BIOTECHNOLOGY.
PA
XX Reddy S, Sadhu L, Shukla V, Ferraiolo G;
PI
XX WPI; 2001-381671/40.
DR
XX Obtaining a stable transplastome for producing a transplastomic cell,
PT plant or seed, comprises transforming a recipient plastome with a
PT polynucleotide comprising a 5' and 3' sequence homologous to the
PT recipient.
XX
XX Example 8; Page 113; 128pp; English.
PS
XX The invention relates to a method of obtaining a stable transplastome, by
CC transforming a recipient plastome (RP) with a polynucleotide having a 5',
CC sequence homologous to a region of RP, and joined to it, a sequence
CC heterologous to RP comprising a coding region operably linked to
CC regulatory region capable of securing expression of coding region in the
CC plastid and joined to it, and a 3' sequence homologous to a region of RP.
CC The method is useful for obtaining a transplastomic plastid, by
CC transforming a plastome within a plastid such as proplastid, amyloplast,
CC chromoplast, etioplast or leucoplast, preferably chloroplast. The method
CC is useful for obtaining a transplastomically expressed protein. The
CC method provides high, uniform, reliable expression of transgenes in
CC plants, with stable inheritance of the trait by avoiding the potential
CC for the dangerous spread of transgenes to the ecosystem. The present
CC sequence represents a PCR primer used in primer extension assays for
CC analysis of transcription initiation from rice promoters in tobacco
CC chloroplasts
XX
SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1186 ATGCCACAGGCCGTC 1201
Db | ||||| ||||| |||||
1 ATGCCACAGGCCGTC 16

RESULT 798
AAC92716
ID AAC92716 standard; DNA; 20 BP.
XX AC AAC92716;
XX AC AAC92716;
DT 27-MAR-2001 (first entry)
XX
XX Human Nck-2 phosphorothioate antisense oligonucleotide, SEQ ID NO:77.
DE
XX Human Nck-2; adapter protein; Nck adapter protein; hNck-beta; Grb4;
KW signal transduction; SH2 domain; SH3 domain; src homology domain;
KW integrin signalling; receptor tyrosine kinase signalling;
KW growth factor receptor signalling; PINCH; v-Abl; Ras; Sos;
KW transcriptional activation; cancer; tumour; leukaemia; breast cancer;
KW expression inhibition; phosphorothioate; antisense oligonucleotide; ss.
XX
```

OS Homo sapiens.
 XX US6165728-A.
 PN
 XX 26-DEC-2000.
 PD
 XX 19-NOV-1999; 99US-00444053.
 PF
 XX 19-NOV-1999; 99US-00444053.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Ward DT, Cowser LM;
 PI
 XX WPI; 2001-090480/10.
 DR
 XX Novel antisense compound which inhibits expression of human nck-2 useful
 PT for treating disease or condition associated with expression of nck-2,
 PT and as research reagents, kits and diagnostics.
 XX
 XX Claim 1; Col 41-42; 38pp; English.
 PS
 XX Sequences AAC92649-C92728 represent antisense oligonucleotides targetted
 CC to the human Nck-2 gene, which inhibit its expression. The antisense
 CC oligonucleotides were designed to target different regions of the human
 CC Nck-2 mRNA, and were analysed for their effect on Nck-2 mRNA levels by
 CC quantitative real-time PCR. Nck-2 (also known as Nck adapter protein,
 CC hNck-beta and Grb4), contains both SH2 and SH3 src homology domains and
 CC functions as an adapter protein in integrin-mediated and receptor
 CC tyrosine kinase-mediated signal transduction, particularly in growth
 CC factor receptor signalling. Moreover, Nck-2 participates in pathways that
 CC connect growth factor receptor signalling and integrin signalling via its
 CC interaction with PINCH, a LIM domain-containing adapter protein which is
 CC involved in integrin, growth factor and Wnt signalling pathways. Nck-2
 CC also interacts with EGF (epidermal growth factor) and PDGF (platelet-
 CC derived growth factor) receptors, inhibiting EGF- and PDGF-stimulated DNA
 CC synthesis in an SH2-dependent manner. Nck-2 is also able to interact with
 CC v-Abl, Ras and Sos proteins to induce transcriptional activation, and is
 CC therefore implicated in the development of cancer, particularly leukaemia
 CC and breast cancer. The oligonucleotides of the invention are useful for
 CC diagnosis, prevention and treatment of conditions associated with Nck-2
 CC expression, such as leukaemia and breast cancer
 XX
 SQ Sequence 20 BP; 5 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 8.1e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 815 ACACGGAGAGTCCCT 830
 DB 4 ACACGGAGAGTCCCT 19
 RESULT 799
 AAF79782/c
 ID AAF79782 standard; DNA; 20 BP.
 XX
 AC AAF79782;
 XX
 XX 29-MAY-2001 (first entry)
 DT
 XX V parahaemolyticus gene specific probe SEQ ID NO: 6.
 DE
 XX Vibrio parahaemolyticus; Escherichia coli; Staphylococcus aureus;
 KW food poisoning; selective probe; ss.
 XX
 OS Vibrio parahaemolyticus.
 XX
 PN EP1085099-A2.
 PD
 XX 21-MAR-2001.
 XX

PF 20-AUG-1992; 2000EP-00125530.
 XX
 PR 18-FEB-1992; 92JP-00030755.
 PR 24-MAR-1992; 92JP-00066082.
 PR 20-AUG-1992; 92EP-00307606.
 XX
 PA (SHWA) SHIMADZU CORP.
 XX
 XX Ohashi T, Tada J, Fukushima S, Ozaki H, Nishimura N, Shirasaki Y;
 PI Yamagata K;
 XX
 DR WPI; 2001-259596/27.
 XX
 XX New oligonucleotides that are selectively hybridizable with the entA, B,
 PT C, D or E gene of Staphylococcus aureus, useful as primers for gene
 PT amplification to selectively detect S. aureus in cases of food poisoning
 PT or in food inspection.
 XX
 XX Example 2; Page 29; 121pp; English.
 PS
 XX The present invention provides the sequences of a number of
 CC oligonucleotides which selectively hybridise to the Staphylococcus aureus
 CC enterotoxin A, B, C, D or E genes. Also provided are the sequences of
 CC probes for Escherichia coli and Vibrio parahaemolyticus genes. These are
 CC useful in the identification of the cause of food poisoning in humans,
 CC and in food inspection procedures
 XX
 SQ Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 8.1e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 224 ATCAGAGTGGTGGTGG 239
 DB 16 ATCAGAGTGGTGGTGG 1
 RESULT 800
 ABA81723
 ID ABA81723 standard; DNA; 20 BP.
 XX
 AC ABA81723;
 XX
 XX 25-JAN-2002 (first entry)
 DT
 XX PCR primer KP139.
 DE
 XX Aldehyde-dehydrogenase; enzyme; phenanthrene; anthracene; PCR primer;
 KW aromatic dihydrodiol dehydrogenase; aromatic diol oxygenase;
 KW hydratase-aldoase; ss.
 XX
 OS Nocardioides sp. KP7.
 XX
 XX JP2001245662-A.
 PN
 XX 11-SEP-2001.
 PD
 XX 03-MAR-2000; 2000JP-00059523.
 PF
 XX 03-MAR-2000; 2000JP-00059523.
 PR
 XX (KAIY-) KAIYO BIOTECHNOLOGY KENKYUSHO KK.
 PA
 XX WPI; 2002-002935/01.
 DR
 XX Genes and proteins involved in the upstream of the pathway of degradation
 PT of a polycyclic aromatic compound.
 PT
 XX Example 4; Page 7; 47pp; Japanese.
 PS
 XX The present invention relates to coding sequences for proteins such as
 XX aromatic dihydrodiol dehydrogenase, aromatic diol oxygenase, hydratase-
 CC

CC aldoase and aldehyde dehydrogenase (ABA001198-ABA001201 and HAM52344-
HAM52347), which are involved in the degradation of polycyclic aromatic
CC compounds. The enzymes are useful as reagents for converting the
CC metabolic intermediates of polycyclic aromatic compounds such as
CC phenanthrene and anthracene. The present sequence is a PCR primer, which
CC was used in an example from the present invention
XX

CC Sequence 20 BP: 1 A; 9 C; 4 G; 6 T; 0 U; 0 Other;

```
Query Match          0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

Qy 921 CCTGTTCCAGCTGCTC 936
 ||| ||| ||| ||| |||
Db 1 CCTGCTCCAGCTGCTC 16

RESULT 801
AAD29525
ID AAD29525 standard: DNA: 20 BP.

Query Match	0.8%	Score 14.4;	DB 1;	Length 20;
Best Local Similarity	93.8%	Pred. No. 8.1e+02;		

Matches	15;	Conservative	0;	Mismatches	1;	Indels	0;	Gaps	0
Qy	1186	ATGCCACAGGCGTC	1201						
Dd	1	ATGCCACAGGCGTC	16						
 RESULT 802									
ABZ31353									
ID	ABZ31353 standard; DNA; 20 BP.								
XX	AC								
XX	AC	ABZ31353;							
XX									
DT	30-JAN-2003 (first entry)								
XX									
DE	Candida albicans GRACE strain PCR primer SEQ ID NO 5572.								
XX									
KW	Fungus; yeast; tetracycline; promoter; GRACE strain; biosynthesis;								
KW	signal transduction; DNA replication; cell division; growth;								
KW	proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.								
XX									
OS	Candida albicans.								
XX									

Query Match 0.8%; Score 14.4; DB 1; Length 20;

```
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 230 GTGGTGGTGGTGGCGG 245
Db 4 GTGGTGGTGGTGGTGG 19

RESULT 803
ABS73431/C
ID ABS73431 standard; DNA; 20 BP.
XX AC
XX ABS73431;
XX AC
XX 03-DEC-2002 (first entry)
XX DT
XX DE
XX DE
XX DE
XX Human; glioma-associated oncogene-2; antisense compound; infection;
XX inflammation; tumour formation; antiinflammatory; antitumour;
XX inhibitor of human glioma-associated oncogene-2 expression;
XX antisense gene therapy; phosphorothioate; ss.
XX OS
XX Homo sapiens.
XX OS
XX Synthetic.
XX OS
XX Chimeric.
XX OS
XX US6440739-BL.
XX PN
XX XX
XX 27-AUG-2002.
XX PD
XX PF
XX 17-JUL-2001; 2001US-00907843.
XX PF
XX 17-JUL-2001; 2001US-00907843.
XX PR
XX (ISTS-) ISIS PHARM INC.
XX PA
XX Bennett CF, Freier SM;
XX PI
XX WPI; 2002-697096/75.
XX DR
XX Novel antisense compound that hybridizes and inhibits nucleic acid
XX encoding human glioma-associated oncogene-2, useful for treatment of
XX diseases associated with human glioma-associated oncogene-2.
XX Example 15; Col 45; 43pp; English.
XX PS
XX The present invention relates to a new antisense compound targeted to
XX human glioma-associated oncogene-2. The invention is useful for
XX inhibiting the expression of human glioma-associated oncogene-2 in cells
XX or tissues. The invention is also useful for treatment of diseases
XX associated with human glioma-associated oncogene-2. The invention is
XX further useful for diagnostics, therapeutics, prophylaxis, as research
XX reagents and kits, for distinguishing functions of various members of a
XX biological pathway, and in antisense gene therapy. The invention is also
XX useful prophylactically, e.g., to prevent or delay infection,
XX inflammation or tumour formation. The present nucleic acid sequence
XX represents an oligonucleotide that was used in the methods of the
XX invention to inhibit human glioma-associated oncogene-2
XX CC
XX Sequence 20 BP; 2 A; 4 C; 9 G; 5 T; 0 U; 0 Other;
XX SQ
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1537 AAGGAGCCAGCCTTC 1552
Db 18 AAGGAGCCAGCCTTC 3

RESULT 804
ABI93000
AB193000 standard; DNA; 20 BP.
XX AC
XX ABI93000;
XX 15-FEB-2002 (first entry)
XX DT
XX DE
XX DE
XX Capture oligonucleotide Zip ID#87 oligo #9.
XX KW
XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
XX ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
XX infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
XX oncogene; tumour suppressor; human papillomavirus; forensic;
XX environmental monitoring; food industry; feed industry; ss.
XX KW
XX Synthetic.
XX OS
XX WO200179548-A2.
XX PN
XX 25-OCT-2001.
XX PD
XX 04-APR-2001; 2001WO-US010958.
XX PF
XX 14-APR-2000; 2000US-0197271P.
XX PR
XX (CORR ) CORNELL RES FOUND INC.
XX PA
XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX PI
XX WPI; 2002-034366/04.
XX DR
XX Designing capture oligonucleotide probes for use on a support to which
XX complementary oligonucleotides hybridize with little mismatch.
XX Example 5; Fig 29; 300pp; English.
XX PS
XX The present invention describes a method (M1) for designing capture
XX oligonucleotide probes (I) for use on a support to which complementary
XX oligonucleotide probes (II) will hybridize with little mismatch, where
XX (I) have melting temperatures within a narrow range. The method is useful
XX for detecting infectious diseases caused by bacterial infectious agents
XX e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
XX infectious agents e.g. Cryptococcus neoformans, Candida albicans and
XX Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
XX Epstein-Barr virus and polio virus, and parasitic infectious agents
XX selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
XX medinensis. The method is also useful for detecting genetic diseases such
XX as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
XX CC
XX Detecting cancer involving oncogenes, tumour suppressor genes, or genes
XX involved in DNA amplification, replication, recombination or repair, the
XX cancer is specifically associated with a gene selected from BRCA1 gene,
XX p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
XX method is also used for environmental monitoring, forensics and the food
XX and feed industry, detecting comprises scanning (using e.g. a scanning
XX electron microscope and infrared microscope) the support at the
XX particular sites and identifying if ligation of the oligonucleotide probe
XX sets occurred and correlating (using a computer) identified ligation to a
XX presence or absence of the target nucleotide sequences. AB182074 to
XX AB197546 represent oligonucleotide sequences used in the exemplification
XX of the present invention
XX CC
XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
XX SQ
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 844 GAGTACCTGGACAAGG 859
Db 5 GAGTACCTGGACAAGG 20

RESULT 805
ADC65809/c
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ID ADC65809 standard; DNA; 20 BP.
XX AC
XX ADC65809;
XX AC
XX 18-DEC-2003 (first entry)
XX DT
XX Mouse TGF-beta receptor II targeted antisense oligonucleotide #8.
XX DE
XX mouse; antisense oligonucleotide;
XX KW transforming growth factor beta receptor II; TGF-beta receptor II;
XX KW hyperproliferative disorder; breast cancer; autoimmune disorder;
XX KW rheumatoid arthritis; 2'-O-methoxyethyl gapmer;
XX KW phosphorothioate backbone; ss; murine.
XX KW
XX OS Mus musculus.
XX OS
XX WO2003000656-A2.
XX FN
XX 03-JAN-2003.
XX PD
XX 19-JUN-2002; 2002WO-US019665.
XX PF
XX 21-JUN-2001; 2001US-00888361.
XX PR
XX (ISIS-) ISIS PHARM INC.
XX PA
XX Murray SF, Wyatt JR;
XX PI
XX WPI; 2003-175279/17.
XX DR
XX New compound having a sequence targeted to a nucleic acid encoding
XX PT Transforming growth factor beta-receptor II, useful for preparing a
XX PT composition for treating hyperproliferative disorder e.g., lung, liver,
XX PT colon or gastric cancer.
XX PT
XX Claim 3; SEQ ID NO 105; 141pp; English.
XX PS
XX The invention comprises antisense oligonucleotides that are targeted to
XX CC the nucleic acid encoding transforming growth factor beta (TGF-beta)
XX CC receptor II. The antisense oligonucleotides of the invention are useful
XX CC for treating: hyperproliferative disorders (e.g. breast cancer), or an
XX CC autoimmune disorder (e.g. rheumatoid arthritis). The present DNA sequence
XX CC represents a 2'-O-methoxyethyl gapmer oligonucleotide with a
XX CC phosphorothioate backbone that is targeted to mouse TGF-beta receptor II.
XX CC
XX SQ Sequence 20 BP; 4 A; 10 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

XX
XX 930 GCTGCTCCGTGGCCTG 945
XX 19 GCTGCTCCGGGGCCTG 4
XX
RESULT 806
ADF87949
ID ADF87949 standard; DNA; 20 BP.
XX AC
XX ADF87949;
XX AC
XX 26-FEB-2004 (first entry)
XX DT
XX Single nucleotide polymorphism detection primer, SEQ ID NO 1532.
XX DE
XX human; single nucleotide polymorphism; microarray; side effect; ss;
XX KW primer; PCR.
XX KW
XX Synthetic.
XX OS
XX Homo sapiens.
XX OS
XX JP2003235571-A.
XX PN
```

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XX 26-AUG-2003.
XX PD
XX 12-FEB-2002; 2002JP-00034717.
XX PF
XX 12-FEB-2002; 2002JP-00034717.
XX PR
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX PA
XX WPI; 2003-820454/77.
XX DR
XX Novel polynucleotide useful for detecting single nucleotide polymorphisms
XX XX in human gene.
XX PT
XX Claim 2; SEQ ID NO 1532; 704pp; Japanese.
XX PS
XX The invention relates to a novel polynucleotide isolated and purified
XX CC from a human gene having any one of 935 fully defined sequences as given
XX CC in specification, or a sequence having a base substitution. The invention
XX CC further relates to: an oligonucleotide containing single nucleotide
XX CC polymorphisms; a PCR primer set chosen from the combination of two DNA
XX CC fragments from any one of 1220 fully defined sequences as given in
XX CC specification; a labelling probe containing the SNP containing oligo; and
XX CC a microarray equipped with the SNP containing oligo. The isolated human
XX CC gene of the invention is useful for detecting the single nucleotide
XX CC polymorphisms in human gene. The isolated human gene is also useful for
XX CC diagnosis of disease and determination of side effect to a medical agent.
XX CC The isolated human gene is also effective in detecting single nucleotide
XX CC polymorphisms in a human gene. This polynucleotide sequence represents
XX CC one of the PCR primers used in the single nucleotide polymorphism
XX CC detection method of the invention.
XX CC
XX SQ Sequence 20 BP; 4 A; 0 C; 11 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

XX
XX 589 GAGATTGGCTTTGGGA 604
XX 3 GAGATTGGCTTTGGGA 18
XX
RESULT 807
ABZ84889
ID ABZ84889 standard; DNA; 20 BP.
XX AC
XX ABZ84889;
XX AC
XX 17-OCT-2003 (first entry)
XX DT
XX Human oligonucleotide sequence.
XX DE
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX KW lung inflammation; respiratory disease; ds.
XX KW
XX OS Homo sapiens.
XX OS
XX WO200285308-A2.
XX FN
XX 31-OCT-2002.
XX PD
XX 23-APR-2002; 2002WO-US013135.
XX PF
XX 24-APR-2001; 2001US-0286137P.
XX PR
XX (EPIG-) EPIGENESIS PHARM INC.
XX PA
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX PI
```

PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 131; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 10 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 133 ATGAGAGATCAAAAC 148
Db 2 ATGAGTAGATCAAAAC 17
||||| |||||

RESULT 808
ABZ87510/C
ID ABZ87510 standard; DNA; 20 BP.

XX AC ABZ87510;

DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 2752; 872pp; English.

XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX

SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 713 GACTGGACATGAAGA 728
Db 16 GGCTGGACATGAAGA 1
||||| |||||

RESULT 809
ABZ85016/C

ID ABZ85016 standard; DNA; 20 BP.

XX AC ABZ85016;

DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Claim 15; SEQ ID NO 258; 872pp; English.
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1171 TGCATCTCTCTATGAGA 1186
Db 20 TGCATCTCTCTATGAGA 5
||||| |||||||

RESULT 810
ABZ77435
ID ABZ77435 standard; DNA; 20 BP.
XX
XX ABZ77435;
XX
XX 28-MAY-2003 (first entry)
XX PCR primer used to amplify Ngn2 cDNA.

XX Immortalized cell; progenitor cell; neural progenitor cell; brain injury;
XX spinal cord injury; Ngn2; PCR; primer; ss.

OS Synthetic.
XX WO2003014320-A2.
XX
XX 20-FEB-2003.
XX

XX 09-AUG-2002; 2002WO-US025389.
XX
XX 10-AUG-2001; 2001US-0311626P.
XX
XX (CORR) CORNELL RES FOUND INC.

XX Goldman SA, Roy NS;
PI
XX WPI; 2003-256571/25.
XX

PT Immortalizing neural progenitor cells useful in treating injuries (e.g.

PT brain or spinal cord injuries), comprises providing a population of
PT progenitor cells and immortalizing the cells before or after they are
PT enriched or purified.

XX Example 5; Page 23; 55pp; English.

XX The specification describes a method of immortalizing progenitor cells,
CC including neural progenitor cells. The method comprises providing a
CC population of progenitor cells and immortalizing the population of the
CC progenitor cells either before or after they are enriched or purified.
CC The method is useful in immortalizing neural progenitor cells that may be
CC used in treating injuries (e.g. brain or spinal cord injuries) and other
CC diseases. PCR primers ABZ77435-36 were used to amplify cDNA encoding Ngn2
CC from immortalized cells of the invention

XX Sequence 20 BP; 5 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1675 GCCCCCACTACATCT 1690
Db 4 GCCCACACTACATCT 19
||||| |||||||

RESULT 811
ABD23740/c
ID ABD23740 standard; DNA; 20 BP.
XX
XX ABD23740;
XX
XX 29-JUL-2004 (first entry)

XX Human myosin X-derived oligonucleotide SEQ ID 2752.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.

XX Claim 15; SEQ ID NO 2752; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 8.1e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 713 GACTGGAACATGAAGA 728
 Db 16 GGCTGGAACATGAAGA 1

RESULT 812

ABD21119
 ID ABD21119 standard; DNA; 20 BP.

XX
 AC ABD21119;

XX
 DT 29-JUL-2004 (first entry)

XX
 DE Human transglutaminase-derived oligo SEQ ID 131.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

OS
 XX WO200285309-A2.

XX
 PD 31-OCT-2002.

XX
 PF 23-APR-2002; 2002WO-US013143.

XX
 PR 24-APR-2001; 2001US-0286036P.

XX
 PA (EPIG-) EPIGENESIS PHARM INC.

XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX
 DR WPI; 2003-093059/08.

XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX
 PS Claim 15; SEQ ID NO 131; 763pp; English.

XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX
 SQ Sequence 20 BP; 10 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 8.1e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 133 ATCAAGAAGATCAAC 148

Db 2 ATGAAGTAGATCAAC 17

RESULT 813

ABD21246/c

ID ABD21246 standard; DNA; 20 BP.

XX
 AC ABD21246;

XX
 DT 29-JUL-2004 (first entry)

XX
 DE Human transglutaminase-derived oligo SEQ ID 258.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX
 FN WO200285309-A2.

XX

PD 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 258; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1171 TGCATCTTCTATGAGA 1186
Db 20 TGCATCTTCTATGAGA 5
||||| |||||
|||

RESULT 814
ADI41030/c
ID ADI41030 standard; DNA; 20 BP.
XX
XX AC ADI41030;
XX
XX DT 22-APR-2004 (first entry)
XX
XX DE Human HGPBRMY41 gene specific antisense primer.
XX
XX Human; ss; primer; GPCR; G protein-coupled receptor;

KW reproductive disorder; testicular disorder; vas deferens disorder;
KW spermatogenesis; infertility; XX male; epididymitis; cryptorchidism;
KW sperm transport disorder; testicular cancer; testicular germ cell tumour;
KW male hormone disorder; premature puberty; Kallman syndrome;
KW Cushing's syndrome; immune disorder; leukaemia; arthritis; asthma; AIDS;
KW rheumatoid arthritis; inflammatory bowel disease; sepsis;
KW T-cell mediated cytotoxicity; graft-versus-host disease;
KW autoimmunity disorder; systemic lupus erythematosus;
KW drug induced haemolytic anaemia; Sjogren's disease;
KW T-cell maturation disorder; B-cell maturation disorder;
KW vascular disorder; stroke; ischaemia; myocardial infarction;
KW atherosclerosis; gastrointestinal disorder; ulcer; pulmonary disorder;
KW brain disorder; endocrine disorder; cancer; gene therapy; PCR.
XX
OS Homo sapiens.
XX
XX US2004018976-A1.
XX
XX 29-JAN-2004.
XX
XX 13-MAY-2003; 2003US-00436715.
XX
XX 14-MAY-2002; 2002US-0380336P.
XX
XX (FEDE/) FEDER J N.
XX (MINT/) MINTIER G.
XX (RAMA/) RAMANATHAN C S.
XX
XX Feder JN, Mintier G, Ramanathan CS;
PI WPI; 2004-122081/12.
XX
XX New human G-protein coupled receptor polypeptide and polynucleotide,
PT useful for diagnosing, preventing, treating or ameliorating a medical
PT condition, e.g. reproductive disorder, immunodeficiency disease or
PT testicular cancer.
XX
PS Example 4; SEQ ID NO 90; 290pp; English.
XX
XX The invention relates to an isolated human G protein-coupled receptor
CC polypeptide and its encoding polynucleotide, including the full length
CC proteins minus the start methionine (and the region of the polynucleotide
CC encoding this protein region). The proteins are designated HGPBRMY30-1,
CC HGPBRMY30-2, HGPBRMY30-3, HGPBRMY41-1, HGPBRMY41-2, HGPBRMY41-3,
CC HGPBRMY42, HGPBRMY42-1, HGPBRMY43 and HGPBRMY44. Also included are
CC expression vectors, host cells, antibodies, preventing (treating or
CC ameliorating) a medical condition comprising administering to a mammalian
CC subject the polypeptide or its modulator and diagnosing a pathological
CC condition or a susceptibility to a pathological condition in a subject
CC (comprising determining the presence or absence of a mutation in the
CC polynucleotide, or the presence or amount of expression of the
CC polypeptide in a biological sample and diagnosing a pathological
CC condition or a susceptibility to a pathological condition based on the
CC presence or absence of the mutation, or the presence or amount of
CC expression of the polypeptide). The human G-protein coupled receptor
CC polypeptide or polynucleotide can be used for diagnosing a pathological
CC condition or a susceptibility to a pathological condition in a subject,
CC and for preventing, treating or ameliorating a medical condition, such as
CC a disorder related to aberrant G-protein coupled receptor activity, a
CC disorder related to aberrant signal transduction, a reproductive disorder
CC ; a male reproductive disorder, a testicular disorder, a vas deferens
CC disorder, spermatogenesis, infertility, Klinefelter's syndrome, XX male,
CC epididymitis, genital warts, germinal cell aplasia, cryptorchidism,
CC varicocele, motile cilia syndrome, viral orchitis, sperm transport
CC disorders, testicular cancer, choriocarcinoma, non-seminoma, seminoma,
CC testicular germ cell tumours, male hormone disorders, premature puberty,
CC incomplete puberty, Kallman syndrome, Cushing's syndrome, an immune
CC disorder, a proliferative immune disorder, leukaemia, arthritis, asthma,
CC immunodeficiency diseases such as AIDS, rheumatoid arthritis,
CC granulomatous disease, inflammatory bowel disease, sepsis, acne,
CC neutropenia, neutrophilia, psoriasis, hypersensitivities, such as T-cell
CC mediated cytotoxicity, immune reactions to transplanted organs and
CC tissues, such as host-versus-graft and graft-versus-host diseases, or

CC autoimmunity disorders, such as autoimmune infertility, demyelination,
 CC systemic lupus erythematosus, drug induced haemolytic anaemia, Sjogren's
 CC disease, scleroderma, T-cell maturation disorders, B-cell maturation
 CC disorders, vascular disorders, stroke, ischaemia, myocardial infarction,
 CC atherosclerosis, embolisms, thrombosis, gastrointestinal disorders,
 CC irritable bowel syndrome, ulcers, pulmonary disorders, brain disorders,
 CC endocrine disorders, or ovarian, stomach, colon or kidney cancer or its
 CC related proliferative condition (many other diseases and disorders are
 CC listed in the specification). The antibodies may be used to purify,
 CC detect and target the G-protein coupled receptor polypeptides. The
 CC polynucleotides are also useful in gene therapy. The present sequence is
 CC a gene specific PCR primer for a nucleic acid encoding a novel GPCR of
 CC the invention.
 XX
 SQ Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 8.1e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 956 ACCGCGAGAGGTGCT 971
 Db ||||| ||||| ||||| |||||
 16 ACCGGAAGAAGGTGCT 1
 RESULT 815
 ADJ62594
 ID ADJ62594 standard; DNA; 20 BP.
 XX
 AC ADJ62594;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Human EDG5 antisense oligonucleotide ISIS126665.
 XX
 KW Human; ss; antisense gene therapy; endothelial differentiation gene 5;
 KW EDG5; G protein-coupled receptor; development; wound healing;
 KW tissue regeneration; cellular proliferation; apoptosis; cancer;
 KW angiogenesis; inflammation; hyperproliferative disorder;
 KW developmental disorder.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "All linkages are phosphorothioate linkages and
 FT all cytidines are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residue"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residue"
 XX
 PN US2004029274-A1.
 XX
 PD 12-FEB-2004.
 XX
 PF 09-AUG-2002; 2002US-00215821.
 XX
 PR 09-AUG-2002; 2002US-00215821.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 PI Wyatt J;
 XX
 DR WPI; 2004-179674/17.
 XX
 FT New antisense oligonucleotide targeted to nucleic acid encoding

PT endothelial differentiation sphingolipid G-protein-coupled receptor 5,
 PT for treating cancer, developmental disorder or a condition arising from
 PT aberrant apoptosis.
 XX
 PS Example 15; SEQ ID NO 54; 50pp; English.
 XX
 CC The invention relates to a compound 8-80 nucleobases in length targeted
 CC to, and which specifically hybridises with a nucleic acid molecule
 CC encoding endothelial differentiation gene 5 (EDG5, a G protein coupled
 CC receptor, involved in development, wound healing, tissue regeneration,
 CC cellular proliferation, apoptosis, cancer, angiogenesis and
 CC inflammation), and inhibits the expression of EDG5, i.e. is an antisense
 CC (AS) oligonucleotide. Also included are a composition comprising the
 CC compound and a carrier or diluent and a method for screening an antisense
 CC compound (by contacting a preferred target region of a nucleic acid
 CC molecule encoding EDG5 with one or more candidate antisense compounds
 CC comprising at least an 8-nucleobase portion that is complementary to the
 CC preferred target region and selecting for one or more candidate antisense
 CC compounds that inhibit the expression of a nucleic acid encoding EDG5).
 CC The compound, composition and methods are useful for treating a disease
 CC or condition associated with EDG5, such as a hyperproliferative disorder,
 CC developmental disorder or a disease or condition arising from aberrant
 CC apoptosis. They are also useful in research and diagnostics for
 CC modulating the expression of EDG5. Experimental protocols are described
 CC but no results are given. The present sequence is an AS oligonucleotide
 CC targeting human EDG5.
 XX
 SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 8.1e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 169 CGAGGTGGCGGAGCA 184
 Db ||||| ||||| ||||| |||||
 3 CGAGGTGGCGGAGCA 18
 RESULT 816
 ADM13644/C
 ID ADM13644 standard; DNA; 20 BP.
 XX
 AC ADM13644;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Insulin-like growth factor 2 DNA amplifying PCR primer #1.
 XX
 KW OncoseqX; diagnosis; prognosis; cancer; tumour; carcinoma; sarcoma;
 KW blastoma; lymphoma; leukaemia; neoplastic disease;
 KW hyperproliferative disorder; Gardner's syndrome; hereditary exostosis;
 KW polyendocrine adenomatosis; Peutz-Jeghers syndrome; medullary thyroid carcinoma;
 KW neurofibromatosis of Von Recklinghausen; carotid body tumour;
 KW pheochromocytoma; retinoblastoma; intraocular melanocarcinoma;
 KW xeroderma pigmentosum; ataxia telangiectasia; Chediak-Higashi syndrome;
 KW albinism; Fanconi's aplastic anaemia; Bloom's syndrome; gene therapy;
 KW PCR; primer; ss.
 XX
 OS Unidentified.
 XX
 PN US2004009541-A1.
 XX
 PD 15-JAN-2004.
 XX
 PF 10-FEB-2003; 2003US-00361725.
 XX
 PR 08-FEB-2002; 2002US-0355009P.
 XX
 XX (SLOK) SLOAN KETTERING INST CANCER RES.
 XX
 PI Singh B, Reddy PG, Reddy PT;
 XX

```

DR WPI; 2004-224178/21.
XX
XX Novel isolated Oncoseq polypeptide, useful for developing therapeutic
PT strategy for pathology such as squamous cell carcinoma and fields
PT associated with oncogenesis and tumor progression.
XX
XX Example; SEQ ID NO 24; 73pp; English.
XX
XX The present invention provides isolated polypeptides designated oncoseqX
CC and their encoding polynucleotides. The invention is useful for
CC diagnosing, prognosing and developing a therapeutic strategy for the
CC pathology which includes cancer, tumour, carcinoma, sarcoma, blastoma,
CC lymphoma, leukaemia and neoplastic disease. The invention is also useful
CC for treating hyperproliferative disorders, Gardner's syndrome, hereditary
CC exostosis, polyendocrine adenomatosis, Peutz-Jeghers syndrome,
CC neurofibromatosis of Von Recklinghausen, medullary thyroid carcinoma with
CC amyloid production and pheochromocytoma, retinoblastoma, carotid body
CC tumour, cutaneous melanocarcinoma, intraocular melanocarcinoma, xeroderma
CC pigmentosum, ataxia telangiectasia, Chediak-Higashi syndrome, albinism,
CC Fanconi's aplastic anaemia and Bloom's syndrome. The invention is also
CC useful in gene therapy. The present sequence is a PCR primer used to
CC amplify insulin-like growth factor 2 DNA. The primer is used in the
CC exemplification of the invention.
XX
XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
SQ
    Query Match          0.8%; Score 14.4; DB 1; Length 20;
    Best Local Similarity 93.8%; Pred. No. 8.1e+02;
    Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 756 AGTGTCCCTGCTCAAG 771
Db 20 ACTGTCCCTGCTCAAG 5
    |||||
    |||||

RESULT 817
ADM14805/c
ID ADM14805 standard; DNA; 20 BP.
XX
XX ADM14805;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:992.
DE
DE chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX

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PN WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX Claim 4; SEQ ID NO 992; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibit its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
SQ
    Query Match          0.8%; Score 14.4; DB 1; Length 20;
    Best Local Similarity 93.8%; Pred. No. 8.1e+02;
    Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 510 CTACCTGGAGAGCTG 525
Db 19 CTACCTGGAGAGCTG 4
    |||||
    |||||
    |||||

RESULT 818
ADM14579/c
ID ADM14579 standard; DNA; 20 BP.
XX
XX ADM14579;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:766.
DE
DE chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX

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```

XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding MPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 766; 132bp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (MPGES-1). The
XX human MPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX MPGES-1, which specifically hybridise with the nucleic acid MPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX MPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with MPGES-1. MPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulatory, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as MPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with MPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 3 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 8.1e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 510 CTACCTGGGAGAGCTG 525
XX |||||
XX 20 CTACCTGGGAGAGCTG 5
XX
XX RESULT 819
XX ADN97774/C
XX ID ADN97774 standard; DNA; 20 BP.
XX
XX ADN97774;
XX

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```

DT 01-JUL-2004 (first entry)
XX
XX Mouse foxhead box O1a sequence inhibitory oligo #8.
XX
XX ss; cytostatic; antidiabetic; foxhead box O1a inhibitor;
XX foxhead box O1a; hyperproliferative disorder; cancer; rhabdomyosarcoma;
XX diabetes; H-ras gene; antisense; gene expression; primer.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH misc_difference 1..20
FT /tag= b
FT /note= "sugar phosphate internucleotide linkages in the
FT backbone are replaced with a phosphorothioate
FT internucleotide linkages"
FT modified_base 1..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "all C are 5'-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "nucleotides are 2'-methoxyethyl-nucleotides"
FT modified_base 16..20
FT /tag= d
FT /mod_base= OTHER
FT /note= "nucleotides are 2'-methoxyethyl-nucleotides"
XX
XX WO2004031350-A2.
XX
XX 15-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030352.
XX
XX 26-SEP-2002; 2002US-00260203.
XX
XX (AMGE-) AMGEN INC.
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW, Bhanot S, Veniant-Ellison M, Lindberg RA, Shutter JR;
XX WPI; 2004-330164/30.
XX
XX New compounds, particularly antisense oligonucleotides, targeted to a
XX nucleic acid molecule encoding foxhead box O1a, useful for treating
XX cancer, or type 2 diabetes.
XX
XX Example 18; SEQ ID NO 64; 146pp; English.
XX
XX The invention relates to a compound 8-80 nucleobases in length targeted
XX to a nucleic acid molecule encoding foxhead box O1a, where the compound
XX is at least 70% complementary to a nucleic acid molecule encoding
XX foxhead box O1a and modulates expression of foxhead box O1a by at least
XX 10%. The compound is useful for treating an animal having a disease or
XX condition associated with foxhead box O1a, e.g. a hyperproliferative
XX disorder (cancer, preferably rhabdomyosarcoma), or type 2 diabetes. This
XX sequence corresponds to an oligonucleotide targeted to the mouse foxhead
XX box O1a genes in order to inhibit gene expression.
XX
XX Sequence 20 BP; 2 A; 3 C; 9 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 8.1e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1383 CGACCTCTCTCACCAG 1398
XX |||||
XX 20 CGACCTCATCAACAAG 5
XX
XX RESULT 820
XX AD054235

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XX OS Homo sapiens.
XX PN WO2004042346-A2.
XX PD 21-MAY-2004.
XX PF 24-APR-2003; 2003WO-US012946.
XX PR 24-APR-2002; 2002US-00131831.
XX PR 20-DEC-2002; 2002US-00325899.
XX PA (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX PI Wohlgenuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
XX PI Rosenberg S;
XX DR WPI; 2004-400724/37.
XX PT Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
XX PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
XX PT rejection, in an individual, comprises detecting the expression level of
XX PT the genes.
XX PS Claim 58; SEQ ID NO 1675; 1762pp; English.
XX CC The present invention relates to diagnosing or monitoring transplant
XX CC rejection, e.g. cardiac or kidney transplant rejection, in an individual
XX CC comprising detecting the expression level of one or more genes. The
XX CC methods, system and kits are useful in diagnosing or monitoring
XX CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
XX CC islet, lung, bone marrow or stem cell transplant rejection,
XX CC xenotransplant rejection or mechanical organ replacement rejection, in an
XX CC individual. The method is also useful in assessing the immune status of
XX CC an individual. The methods are also useful in diagnosing and monitoring
XX CC diseases that involve the immune system, e.g. rheumatoid arthritis,
XX CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
XX CC viral, bacterial or fungal infection. The present sequence represents a
XX CC primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
XX CC of allograft rejection and other disorders.
XX SQ Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1631 CCAGCAGCGCAGCGGCT 1646
Db 19 CCAGCAGCGCAGTGCT 4
RESULT 823
ADO25110
ID ADO25110 standard; DNA; 20 BP.
AC ADO25110;
XX 12-AUG-2004 (first entry)
XX Mouse checkpoint kinase 1 DNA target sequence #23.
DE Mouse checkpoint kinase 1 DNA target sequence #23.
XX Antisense therapy; mouse; checkpoint kinase 1; Chk1;
XX hyperproliferative disorder; cancer; cytostatic; ds.
XX Mus musculus.
XX US2004097446-A1.
XX 20-MAY-2004.
XX 16-NOV-2002; 2002US-00298994.
XX

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PR 16-NOV-2002; 2002US-00298994.
XX (ISIS-) ISIS PHARM INC.
XX Gaarde W, Freier SM, Dobie KW, Watt AT;
XX WPI; 2004-430923/40.
XX New compounds, particularly oligonucleotides targeted to a nucleic acid
XX encoding checkpoint kinase 1, useful for treating diseases associated
XX with checkpoint kinase 1, e.g. hyperproliferative disorders.
XX Example 16; SEQ ID NO 192; 66pp; English.
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding human/mouse checkpoint kinase 1 (Chk1). The
XX antisense compound comprises an antisense oligonucleotide that
XX specifically hybridizes with the nucleic acid and inhibits the expression
XX of Chk1. The antisense oligonucleotide is a chimeric oligonucleotide. The
XX antisense oligonucleotide comprises at least one modified internucleoside
XX linkage, preferably a phosphorothioate linkage. It also comprises at
XX least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX sugar moiety. The antisense oligonucleotide further comprises at least
XX one modified nucleobase, preferably a 5-methylcytosine. The antisense
XX oligonucleotides are useful for the treatment of diseases such as
XX hyperproliferative disorders, e.g. cancer. The present sequence
XX represents mouse Chk1 DNA target sequence for an antisense
XX oligonucleotide.
XX SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1031 CTGACTTTGGCGCTGGC 1046
Db 2 CTGACTTTGGCTTGGC 17
RESULT 824
ADO25003/c
ID ADO25003 standard; DNA; 20 BP.
XX ADO25003;
XX 12-AUG-2004 (first entry)
XX Mouse checkpoint kinase 1 DNA, antisense oligonucleotide #30.
DE Mouse checkpoint kinase 1 DNA, antisense oligonucleotide #30.
XX Antisense therapy; mouse; checkpoint kinase 1; Chk1;
XX hyperproliferative disorder; cancer; cytostatic; phosphorothioate; ss.
XX Mus musculus.
XX Key Location/Qualifiers
XX modified_base 1..20 a
XX /mod_base= OTHER
XX /note= "This oligonucleotide has a phosphorothioate
XX backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
XX and 3' ends, which are 5 nucleotides in length at each
XX end. All cytidine residues are 5-methylcytidines"
XX US2004097446-A1.
XX 20-MAY-2004.
XX 16-NOV-2002; 2002US-00298994.
XX 16-NOV-2002; 2002US-00298994.
XX (ISIS-) ISIS PHARM INC.

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XX Gaarde W, Freier SM, Dobie KW, Watt AT;
XX WPI; 2004-430923/40.
XX
XX New compounds, particularly oligonucleotides targeted to a nucleic acid
PT encoding checkpoint kinase 1, useful for treating diseases associated
PT with checkpoint kinase 1, e.g. hyperproliferative disorders.
XX
XX Example 16; SEQ ID NO 85; 66pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding human/mouse checkpoint kinase 1 (Chk1). The
CC antisense compound comprises an antisense oligonucleotide that
CC specifically hybridizes with the nucleic acid and inhibits the expression
CC of Chk1. The antisense oligonucleotide is a chimeric oligonucleotide. The
CC antisense oligonucleotide comprises at least one modified internucleoside
CC linkage, preferably a phosphorothioate linkage. It also comprises at
CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
CC sugar moiety. The antisense oligonucleotide further comprises at least
CC one modified nucleobase, preferably a 5-methylcytosine. The antisense
CC oligonucleotides are useful for the treatment of diseases such as
CC hyperproliferative disorders, e.g. cancer. The present sequence
CC represents an antisense oligonucleotide used in the examples of the
XX present invention.
XX
SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. NO. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1031 CTGACTTGGCTGCG 1046
DB 19 CTGACTTGGCTGCG 4
RESULT 825
ADN40710/C
ID ADN40710 standard; DNA; 20 BP.
XX
XX ADN40710;
XX
XX 12-AUG-2004 (first entry)
XX
XX Mouse forkhead box O1a DNA antisense oligonucleotide #8.
XX
XX Mouse; forkhead box O1a; ss; antisense oligonucleotide;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; hyperproliferative disorder; cancer; rhabdomyosarcoma;
KW type 2 diabetes; cytostatic; antidiabetic.
XX
XX Mus musculus.
OS
XX
XX US2004097459-A1.
FN
XX
XX 20-MAY-2004.
PD
XX
XX 25-SEP-2003; 2003US-00671074.
PF
XX
XX 26-SEP-2002; 2002US-00260203.
PR
XX
XX (DOB1/) DOBIE K W.
PA (BHAN/) BHANOT S.
PA (VENI/) VENIANT-ELLISON M.
PA (LIND/) LINDBERG R A.
PA (SHUT/) SHUTTER J R.
XX
XX Dobie KW, Bhanot S, Veniant-Ellison M, Lindberg RA, Shutter JR;
PI WPI; 2004-389194/36.
XX
XX New compounds, particularly antisense oligonucleotides, targeted to a

PT nucleic acid molecule encoding forkhead box O1a, useful for treating
PT cancer, or type 2 diabetes.
XX
XX Example 18; SEQ ID NO 64; 80pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding the human forkhead box O1a polypeptide. The compound is an
CC antisense oligonucleotide that specifically hybridizes with the nucleic
CC acid and inhibits expression of the polypeptide. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage
CC i.e. a phosphorothioate linkage, at least one modified sugar moiety,
CC preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
CC nucleobase comprising a 5-methylcytosine. The antisense compounds are
CC useful for modulating the expression of the human forkhead box O1a
CC polypeptide and in preparation of a composition for treating
CC hyperproliferative disorders, e.g. cancer, preferably rhabdomyosarcoma,
CC and type 2 diabetes. This sequence represents an antisense
CC oligonucleotide targeted to DNA encoding the mouse forkhead O1a
CC polypeptide of the invention.
XX
SQ Sequence 20 BP; 2 A; 3 C; 9 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. NO. 8.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1383 CGACTCTCTCACCAG 1398
DB 20 CGACTCTATCACCAG 5
RESULT 826
ADP49202
ID ADP49202 standard; DNA; 20 BP.
XX
XX ADP49202;
XX
XX 26-AUG-2004 (first entry)
XX
XX Human/rat betal-adrenergic receptor gene forward PCR primer.
XX
XX ss; primer; respiratory; central nervous system; antiasthmatic;
KW antimicrobial; cardiovascular;
KW beta-adrenergic signal transduction pathway;
KW transforming growth factor-beta; TGF-beta; lung function;
KW bronchoconstrictive disease; heart disease; congestive heart failure;
KW emphysema; chronic bronchitis; chronic obstructive pulmonary disease;
KW pulmonary edema; cystic fibrosis; occlusive lung disease;
KW acute respiratory deficiency syndrome; asthma;
KW radiation-induced injury of lung; lung injury; inhaled toxin; aging;
KW adrenergic receptor.
XX
XX Homo sapiens.
OS
XX
XX WO2004048930-A2.
FN
XX
XX 10-JUN-2004.
PD
XX
XX 20-NOV-2003; 2003WO-US037416.
PF
XX
XX 22-NOV-2002; 2002US-0429046P.
PR
XX
XX 18-SEP-2003; 2003US-0504585P.
PR
XX
XX (SCIO-) SCIOS INC.
PA
XX
XX Feng Y, Higgins LS, Kapoun AM, Liu DY, Schreiner GF;
PI WPI; 2004-468347/44.
XX
XX Counteracting pathologic change in beta-adrenergic signal transduction
PT pathway, by administering compound capable of inhibiting transforming
PT growth factor-beta (TGF-beta) signaling through TGF-beta receptor, to
PT mammal.

XX Example 1; SEQ ID NO 4; 139pp; English.

PS The invention relates to a method for counteracting (M1) a pathologic

CC change in the beta-adrenergic signal transduction pathway which involves

CC administering a compound (I) capable of inhibiting transforming growth

CC factor-beta (TGF-beta) signaling through a TGF-beta receptor, to a

CC mammalian subject in need of counteracting a pathological change in beta-

CC adrenergic signal transduction pathway. (M1) is useful for counteracting

CC a pathologic change in the beta-adrenergic signal transduction pathway,

CC where the pathologic change results in disease or condition benefiting

CC from the improvement of lung function. The disease or condition is

CC bronchoconstrictive disease or heart disease such as congestive heart

CC failure. The disease or condition is chosen from emphysema, chronic

CC bronchitis, chronic obstructive pulmonary disease (COPD), pulmonary

CC edema, cystic fibrosis (CF), occlusive lung disease, acute respiratory

CC deficiency syndrome (ARDS), asthma, radiation-induced injury of lung,

CC lung injuries resulting from other factors such as infectious causes,

CC inhaled toxins, circulating exogenous toxins or aging, and genetic

CC predisposition to impaired lung function. In an example of the invention,

CC human or rat cells are contacted with TGF-beta R1 receptor inhibitor to

CC counteract pathologic changes in the beta-adrenergic signal transduction

CC pathway. Expression of adrenergic receptor genes were then analysed by

CC PCR amplification. This sequence corresponds to a PCR primer to amplify

CC the human and rat beta1-adrenergic receptor genes.

XX

SQ Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 8.1e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1315 TACAACCTACCCCAAGT 1330

||||| |||||||

DB 4 TACACGACCCCAAGT 19

RESULT 827

ADQ26572

ID ADQ26572 standard; DNA; 20 BP.

XX

AC ADQ26572;

XX

DT 23-SEP-2004 (first entry)

XX

DE HOXA4 RT-PCR primer, SEQ ID 58.

XX

XX Cytostatic; Pre-B-cell transformation related gene; PBX; HOX; cancer;

KW HOX heptapeptide region; RT-PCR; primer; ss; HOXA4.

XX

OS Homo sapiens.

XX

PN WO2004055049-A1.

XX

PD 01-JUL-2004.

XX

PF 12-DEC-2003; 2003WO-GB005425.

XX

PR 13-DEC-2002; 2002GB-00029151.

XX

PA (SGEO-) ST GEORGES ENTERPRISES LTD.

XX

PI Morgan RGL, Pettengell R, Forraz NPB, McGuckin CP;

XX

XX WPI; 2004-533652/51.

XX

PT Use of peptide that impairs Pre-B-cell transformation related gene-

PT dependent regulation of gene transcription by affecting binding to Hox,

PT for treating or preventing disorders involving aberrant cell division,

PT especially cancer.

XX

XX Example 4; SEQ ID NO 58; 113pp; English.

CC The present invention relates to peptides which impair Pre-B-cell

CC transformation related gene (PBX)-dependent regulation of gene

CC transcription, since they mimic the region of HOX to which PBX binds and

CC act as antagonists of that binding. The peptides are based on the

CC hexapeptide region of HOXB-4 but have been found to have cross-reactivity

CC and reduce the binding of PBX to all HOX proteins. The peptides are

CC useful for manufacturing a medicament for the treatment or prevention of

CC a disorder in which aberrant cell division occurs e.g. cancer. The

CC peptides also further comprise a cell penetration moiety that is linked

CC directly to the carboxy-terminal of the peptide. The peptides are also

CC useful for reducing the side effects of a cytotoxic or chemotherapeutic

CC agent, or for maintaining or expanding a stem cell population in vivo.

CC The stem cells, which are originally derived from the recipient

CC individual, may be used in manufacturing a medicament for the treatment

CC or prevention of a condition resulting in a decreased level of stem

CC cells, such as a condition resulting from chemotherapy or radiotherapy.

CC The present sequence is a RT-PCR which was used in an example from the

CC invention.

XX

SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 8.1e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 131 GGATGAAGAAGATCAA 146

||||| |||||||

DB 5 GGATGAAGAAGATCCA 20

RESULT 828

AAQ50630/c

ID AAQ50630 standard; DNA; 21 BP.

XX

AC AAQ50630;

XX

DT 03-JUN-1994 (first entry)

XX

DE NANBV primer.

XX

KW NANBV; non-A non-B hepatitis virus; prophylaxis; liver; serum;

KW chimpanzee; clone; kit; ss.

XX

OS Synthetic.

XX

PN JP05284969-A.

XX

PD 02-NOV-1993.

XX

PF 09-APR-1992; 92JP-00088840.

XX

PR 09-APR-1992; 92JP-00088840.

XX

PA (DAUC) DAIICHI KAGAKU YAKUJIN KK.

PA (DAUC) DAIICHI PHARM CO LTD.

XX

XX WPI; 1993-382212/48.

XX

XX Hepatitis virus gene for corresp. polypeptide - used in treatment and

PT prophylaxis of non-A, non-B-hepatitis, for encoding specified base

PT aminoacid sequence.

XX

PS Disclosure; Page 5; 11pp; Japanese.

XX

XX The DNA sequences (AAQ50623-28) are obtained by extracting RNA from liver

CC or serum of a patient or chimpanzee infected with NANBV, synthesising

CC cDNA and detecting the gene fragment which is negative to anti-HCV

CC antibody and cloning the fragment. The derived proteins (AAR44404-08) can

CC be used to detect NANBV. The DNA and protein are useful in the treatment

CC or prophylaxis of non-A, non-B hepatitis. The primers (AAQ50629-30) are

CC used in the amplification process

XX

SQ Sequence 21 BP; 5 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 8.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 883 TGTGGGACATCATCA 898
|||||
DB 17 TGTGGGACTTCATCA 2

RESULT 829
AAV57643/C
ID AAV57643 standard; DNA; 21 BP.
XX
AC AAV57643;
XX
XX 27-NOV-1998 (first entry)
XX
XX Exon 5 of an ENaC subunit amplifying forward primer B-6.
XX
XX Epithelial sodium channel; ENaC; mutation; pathological condition;
KW ion transport; water retention; blood pressure; metabolic acidosis;
KW chronic respiratory disease; inflammation; human; PCR primer; ss.
XX
XX Synthetic.
OS Homo sapiens.
OS
XX WO9840516-A1.
XX
XX 17-SEP-1998.
PD
XX PF 11-MAR-1998; 98WO-US004681.
XX
XX 11-MAR-1997; 97US-0040171P.
PR
XX (UYUA) UNIV YALE.
PA
XX Lifton RP, Chang SS, Rossier BC;
PI
XX WPI; 1998-506740/43.
DR
XX
XX Determination of presence of mutation conferring pathological condition
PT mediated by altered ion transport - comprises analysing sample for
PT presence of mutation of potassium ion channel gene, ENaC, or in its
PT encoded protein.
XX
XX Example 1; Page 38; 56pp; English.

XX Sequences shown in AAV57601 to AAV57686 represent primers used for the
CC PCR amplification of the exons of the different subunits of the human
CC epithelial sodium channel (ENaC) gene. This is used in the method of the
CC invention of determining the presence or absence of a mutation conferring
CC a pathological condition mediated by altered ion transport. The method
CC comprises analysing a nucleic acid sample, or protein sample, for the
CC presence of a mutation in the ENaC gene, or in its encoded protein. A
CC vector containing a nucleic acid encoding a human altered variant of the
CC ENaC protein can be used to transform host cells to produce an altered
CC variant of an ENaC protein. The protein can be used to identify agents
CC that affect ion transport. The agonists can be used to treat pathological
CC conditions resulting from abnormal ion transport, such as water
CC retention, increased blood pressure, chronic respiratory and metabolic
CC acidosis and inflammation
XX
SQ Sequence 21 BP; 3 A; 14 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 8.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1158 GTGGGGTGTGGCTGC 1173
|||||
DB 17 GTGGGGTGTGGCTGC 2

RESULT 830
AAF96904
ID AAF96904 standard; DNA; 21 BP.
XX
AC AAF96904;
XX
XX 06-JUN-2001 (first entry)
XX
XX Human gene single nucleotide polymorphism #1665.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH Variation replace(11.G)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
XX WO200118250-A2.
PN
XX 15-MAR-2001.
PD
XX 07-SEP-2000; 200WO-US024503.
PF
XX 10-SEP-1999; 99US-0153357P.
PR
XX 26-JUL-2000; 2000US-0220947P.
PR
XX 16-AUG-2000; 2000US-0225724P.
PR
XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
PI WPI; 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX
XX Example; Page 160; 242pp; English.

XX The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 8.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 849 CCTGGACAAGGACCTG 864
|||||
DB 6 CCTGGACAAGTACCTG 21

RESULT 831
AAI73045
ID AAI73045 standard; DNA; 21 BP.

XX AAI73045;
 AC 24-OCT-2002 (first entry)
 DT
 XX
 DE
 DE
 XX
 XX Gene; frosty; 7 transmembrane family; GPCR64; fetal liver; placenta;
 KW testes; uterus; vaccine; allergy; infection; Parkinson's disease;
 KW human immunodeficiency virus; HIV-1; HIV-2; pain; cancer; diabetes;
 KW obesity; anorexia; bulimia; asthma; migraine; vomiting; anxiety; PCR;
 KW acute heart failure; hypotension; hypertension; urinary retention;
 KW osteoporosis; angina pectoris; myocardial infarction; stroke; ulcer;
 KW benign prostatic hypertrophy; Gilles de la Tourette's syndrome; primer;
 KW schizophrenia; manic depression; delirium; dementia; mental retardation;
 KW dyskinesia; Huntington's disease; ss.
 XX
 XX Homo sapiens.
 OS
 PN US2002064830-A1.
 XX
 XX 30-MAY-2002.
 XX
 XX 22-JUN-2001; 2001US-00887377.
 PF
 XX 28-JUN-2000; 2000US-0214355P.
 PR
 XX (ALIS/) ALI S.
 PA (HILL/) HILL J.
 PA (VAMT/) VAWTER L.
 XX
 XX Ali S, Hill J, Vawter L;
 PI
 XX WPI; 2002-573695/61.
 DR
 XX
 XX New frosty polypeptide, a member of 7 transmembrane family of
 PT polypeptides and encoding polynucleotide, useful for diagnosing and
 PT treating infections, cancer, diabetes, osteoporosis, psychotic and
 PT neurological disorders.
 XX
 XX Example 8; Page 12; 17pp; English.
 PS
 XX The sequences given in AAI73045-47 are primers and a probe which were
 CC used in TaqMan analysis of frosty mRNA. Frosty is a member of the 7
 CC transmembrane family of polypeptides and shows homology with GPCR64.
 CC Frosty is expressed in fetal liver, placenta, testes and uterus. Frosty
 CC and the corresponding cDNA are useful as vaccines. Frosty and frosty cDNA
 CC are also useful in the diagnosis and treatment of human diseases
 CC including allergies, infections such as bacterial, fungal, protozoan, and
 CC viral infections, particularly infections caused by human
 CC immunodeficiency virus (HIV)-1 or HIV-2, pain, cancers, diabetes,
 CC obesity, anorexia, bulimia, asthma, Parkinson's disease, acute heart
 CC failure, hypotension, hypertension, urinary retention, osteoporosis,
 CC angina pectoris, myocardial infarction, stroke, ulcers, benign prostatic
 CC hypertrophy, migraine, vomiting, psychotic and neurological disorders
 CC including anxiety, schizophrenia, manic depression, delirium, dementia,
 CC severe mental retardation and dyskinesias such as Huntington's disease
 CC or Gilles de la Tourette's syndrome. They are also useful for identifying
 CC compounds that may be agonists or antagonists which are also useful in
 CC therapy. Frosty is useful as an immunogen to produce antibodies
 CC immunospecific for the polypeptide. The antibodies are useful to isolate
 CC or to identify the clones expressing the polypeptide or to purify the
 CC polypeptides by affinity chromatography. The antibodies may also be
 CC employed to treat diseases. Frosty is also useful to identify membrane
 CC bound or soluble receptor. Frosty cDNA is useful for creating transgenic
 CC and knock-out animals, and for chromosome localization studies
 XX
 XX Sequence 21 BP; 8 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
 SQ

Query Match 0.8%; Score 14.4; DB 1; Length 21;
 Best Local Similarity 93.8%; Pred. No. 8.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 956 ACCGGCAGAGGTGCT 971
 ||||| ||||| |||||
 Db 5 ACCGGAGAGAGGTGCT 20
 ||||| ||||| |||||
 RESULT 832
 ABK65706
 ID ABK65706 standard; DNA; 21 BP.
 XX
 AC ABK65706;
 XX
 DT 02-JUL-2002 (first entry)
 XX
 DE Human single nucleotide polymorphism #326.
 XX
 XX Human; single nucleotide polymorphism; SNP; sickle cell anaemia;
 KW agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;
 KW muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;
 KW familial hypercholesterolaemia; polycystic kidney disease; cancer;
 KW hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis;
 KW hereditary haemorrhagic telangiectasia; familial colonic polyposis;
 KW Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;
 KW acute intermittent porphyria; inflammation; nervous system disorder;
 KW infection; rheumatoid arthritis; multiple sclerosis; diabetes;
 KW systemic lupus erythematosus; Graves disease; longevity; obesity;
 KW baldness; fertility; forensic; paternity testing; ss.
 XX
 OS Homo sapiens.
 XX
 XX US2002037508-A1.
 PN
 XX 28-MAR-2002.
 PD
 XX 18-JAN-2001; 2001US-00765081.
 PF
 XX 19-JAN-2000; 2000US-0176861P.
 PR
 XX (CARG/) CARGILL M.
 PA (IREL/) IRELAND J S.
 PA (LAND/) LANDER E S.
 XX
 XX Cargill M, Ireland JS, Lander ES;
 PI
 XX WPI; 2002-315108/35.
 XX
 XX Nucleic acid comprising single nucleotide polymorphisms, useful in
 PT forensics, paternity testing and diagnosis of disease.
 PS
 XX Claim 1; Page 77; 96pp; English.
 XX
 XX The invention relates to a nucleic acid comprising single nucleotide
 CC polymorphisms (SNPs) associated with diseases. The nucleic acids
 CC comprising the SNPs and probes and primers for detecting them may be used
 CC in assays for the diagnosis of diseases associated with SNPs (such as
 CC sickle cell anaemia, agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan
 CC syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,
 CC familial hypercholesterolaemia, polycystic kidney disease, hereditary
 CC spherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary
 CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
 CC syndrome, osteogenesis imperfecta, and acute intermittent porphyria,
 CC symptoms of, or susceptibility to, multifactorial diseases of which a
 CC component is or may be genetic, such as autoimmune diseases,
 CC inflammation, cancer, diseases of the nervous system, and infection by
 CC pathogenic microorganisms, autoimmune diseases including rheumatoid
 CC arthritis, multiple sclerosis, diabetes (insulin-dependent and non-
 CC independent), systemic lupus erythematosus and Graves disease, cancers
 CC including cancers of the bladder, lung, breast, colon, oesophagus,
 CC kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,
 CC skin, stomach and uterus, longevity, appearance (e.g., baldness,
 CC obesity), strength, speed, endurance, fertility, and susceptibility or
 CC receptivity to particular drugs or therapeutic treatments), in forensics
 CC and in paternity testing. ABK65381-ABK65841 represent human single
 CC nucleotide polymorphisms of the invention

SQ	Sequence 21 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 1 Other;	DB	2 CACTCAGCTGGCACC 17
Query Match	0.8%; Score 14.4; DB 1; Length 21;	RESULT 834	
Best Local Similarity	83.3%; Pred. No. 8.4e+02;	ABS98129/c	
Matches 15; Conservative 1; Mismatches 2; Indels 0; Gaps 0;		ID	ABS98129 standard; DNA; 21 BP.
		XX	ABS98129;
QY	886 GGGACATCATCAACATG 903 .:	AC	ABS98129;
DB	2 GGGACAGGTCACATG 19 .:	XX	23-DEC-2002 (first entry)
RESULT 833		XX	Human multidrug resistance gene polymorphic sequence #31.
ABA94579		XX	Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDRL;
ID ABA94579 standard; DNA; 21 BP.		KW	Cytochrome P450 A2; CYP4501A2; Cytochrome P450 02E; CYP45002B1; LTF;
XX		KW	adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR1I2;
AC ABA94579;		KW	aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
XX		KW	cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
DT 09-APR-2002 (first entry)		KW	epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
XX		KW	glutathione-S-transferase 12; GSTI2; histamine-N-methyl transferase;
DE		KW	HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
XX		KW	NADPH quinone oxidoreductase 2; NQO2; sulfotransferase thermolabile; STM;
XX		KW	UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW		KW	UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
KW		KW	multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
XX		KW	multidrug resistance associated protein 3; cancer; prostate;
OS		KW	acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
XX		KW	altered drug metabolism; cardiovascular function; colorectal tumour;
FN WO200196578-A2.		KW	central nervous system; pulmonary; immunological; SNP;
XX		KW	single nucleotide polymorphism.
PD 20-DEC-2001.		XX	Homo sapiens.
XX		OS	
PF 14-JUN-2001; 2001WO-US019340.		XX	WO200257410-A2.
XX		FN	
XX		PD	25-JUL-2002.
PR 15-JUN-2000; 2000US-00595344.		XX	
XX		PF	28-NOV-2001; 2001WO-US044838.
PA (UYGE-) UNIV GEORGIA RES FOUND INC.		XX	
XX		PR	28-NOV-2000; 2000US-00724389.
PI Li X, Ljungdahl LG;		XX	(DNAS-) DNA SCI LAB INC.
XX		PI	Guida M, Hall J;
XX		XX	WPI; 2002-698522/75.
DR WPI; 2002-130735/17.		XX	
PT New isolated nucleic acid encoding a signal peptide for efficient and		PT	Isolated nucleic acid molecules having polymorphisms in known human genes
PT economical secreted expression of a protein of interest in a eukaryotic		PT	e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
PT cell, widely used in pharmaceutical, food and chemical industries.		PT	for locating, identifying and characterizing the genes responsible for
XX		XX	disorder-related traits.
PS Example 1; Page 28; 43pp; English.		PS	Example 22; Page 144; 714pp; English.
XX		XX	
CC The invention relates to an isolated nucleic acid molecule comprising a		CC	This invention relates to the sequence of an isolated nucleic acid
CC xylanase (xynA) transcriptional regulatory sequence operably linked to a		CC	molecule comprising at least one base variation from that of a known
CC heterologous coding sequence. Provided is a method for producing a		CC	human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
CC heterologous protein in Aureobasidium pullulans, by up-regulating the		CC	cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADRB1),
CC expression of a sequence encoding a heterologous protein by adding xylan		CC	aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC or xylose to a medium in which a recombinant A. pullulans cell comprising		CC	(ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
CC the new isolated nucleic acid molecule is cultured, where the medium		CC	inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
CC contains glucose at a concentration less than 0.02 % (weight/volume) and		CC	protein (FLAP), glutathione-S-transferase 12 (GSTI2), histamine-N-methyl
CC a xynA transcription regulatory sequence is operably linked to the		CC	transferase (HNMT), (kallikrein 2) KLK2, nicotinamide -N-methyl
CC sequence encoding the heterologous protein, and the heterologous protein		CC	transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC is expressed. The nucleic acid containing a signal peptide-encoding		CC	sulfotransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC sequence, is useful for efficient and economical secreted expression of a		CC	UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC protein of interest in a eukaryotic cell, especially a fungal cell such		CC	transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
CC as Aureobasidium pullulans. It may be used as a probe. The proteins		CC	transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance associated protein 3
CC produced are widely used in pharmaceutical, food, chemical and other		CC	(MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC industries. The present sequence represents a PCR primer for amplifying		CC	(MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
CC the nucleotide sequence of A. pullulans xynA locus		CC	receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
XX		XX	The polymorphisms in the human genes cited in the invention are useful as
SQ Sequence 21 BP; 4 A; 9 C; 4 G; 4 T; 0 U; 0 Other;		XX	genetic linkage markers for locating and characterising the genes that
Query Match	0.8%; Score 14.4; DB 1; Length 21;	XX	are responsible for specific traits within the genome and eventually
Best Local Similarity	93.8%; Pred. No. 8.4e+02;		
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;			
QY	308 CACTCAGCTCTGCACC 323 .:		

CC identifying the genes responsible for a variety of disorder-related
CC traits as a result of their e.g., overexpression, constitutive
CC expression, mutation or underexpression, which may be used in diagnosing
CC and/or treating the disorders. The nucleic acid molecules comprising the
CC polymorphic sequences contained in CYP4501A1, CYP4501A2, CYP4502E1,
CC ARNT, EPHX2, GST12, NMT, NOO2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC metabolism. The polymorphic sequences contained in CYP4501A1, CYP4501A2,
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRE1 or CHMR2 are
CC used to screen for altered cardiovascular function, in COX2 for altered
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC nervous system function, in FLAP and HMT for altered pulmonary,
CC immunological or haematological function, in KIK2 for altered serine
CC protease activity in the prostate, in LTF for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a
CC polymorphic DNA sequence of the invention.

XX
SQ Sequence 21 BP; 7 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 8.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 52 GCAGTGTGACTGCTGA 67
||| ||||| ||||| |||||
Db 18 GCATGTGACTGTGA 3

RESULT 835
ACC58762
ID ACC58762 standard; DNA; 21 BP.

AC ACC58762;

XX 26-AUG-2003 (first entry)

XX Pro-alpha(III) chain 5' PCR primer.

XX Collagen; procollagen; pro-alpha chain; vulnery; gene therapy;
KW drug delivery; PCR; primer; ss.

XX Unidentified.

XX WO2003035692-A2.

XX 01-MAY-2003.

XX 23-OCT-2002; 2002WO-GB004785.

XX 23-OCT-2001; 2001GB-00025369.

XX 23-OCT-2001; 2001GB-00025372.

XX (UYMA-) UNIV VICTORIA MANCHESTER.

XX Kadler KE, Bulleid NJ;

XX WPI; 2003-504991/47.

XX Novel modified pro-alpha-chain useful for treating wounds and fibrotic
PT disorders, has triple helical forming domain linked to N-terminal domain
PT that contains a polypeptide sequence from proteoglycan protein core.

XX Example 1; Page 33; 73pp; English.

XX The present sequence is that of a 5' primer, which was used with the 3'
CC primer given in ACC58763 for the PCR amplification of the pro-alpha(III)
CC chain. The PCR product was used to prepare a DNA molecule (see ACC58766)
CC encoding a modified pro-alpha chain (see ABR42661) in which decorin
CC replaced the globular domain of the N-propeptide of the pro-alpha(III)
CC chain. This is an example of modified pro-alpha chains of the invention
CC that may form part of a procollagen molecule for incorporation into

CC collagen polymers, matrices and gels used to treat wounds and fibrotic
CC disorders, in tissue replacement, and in cosmetic treatments

XX
SQ Sequence 21 BP; 7 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 8.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 764 TGCTCAAGGACCTCAA 779
||| ||||| ||||| |||||
Db 3 TGCTCAAGGACCTCAA 18

RESULT 836

ADF88480

ID ADF88480 standard; DNA; 21 BP.

XX ADF88480;

XX 26-FEB-2004 (first entry)

XX Single nucleotide polymorphism detection primer, SEQ ID No 2063.

XX human; single nucleotide polymorphism; microarray; side effect; ss;
KW primer; PCR.

XX Synthetic.

XX Homo sapiens.

XX JF2003235571-A.

XX 26-AUG-2003.

XX 12-FEB-2002; 2002JP-00034717.

XX 12-FEB-2002; 2002JP-00034717.

XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.

XX WPI; 2003-820454/77.

XX Novel polynucleotide useful for detecting single nucleotide polymorphisms
PT in human gene.

XX Claim 2; SEQ ID No 2063; 704pp; Japanese.

XX The invention relates to a novel polynucleotide isolated and purified
CC from a human gene having any one of 935 fully defined sequences as given
CC in specification, or a sequence having a base substitution. The invention
CC further relates to: an oligonucleotide containing single nucleotide
CC polymorphisms; a PCR primer set chosen from the combination of two DNA
CC fragments from any one of 1220 fully defined sequences as given in
CC specification; a labelling probe containing the SNP containing oligo; and
CC a microarray equipped with the SNP containing oligo. The isolated human
CC gene of the invention is useful for detecting the single nucleotide
CC polymorphisms in human gene. The isolated human gene is also useful for
CC diagnosis of disease and determination of side effect to a medical agent.
CC The isolated human gene is also effective in detecting single nucleotide
CC polymorphisms in a human gene. This polynucleotide sequence represents
CC one of the PCR primers used in the single nucleotide polymorphism
CC detection method of the invention.

XX Sequence 21 BP; 2 A; 6 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 8.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1165 GTGGCTGCATCTTCT 1180
||| ||||| ||||| |||||
Db 3 GTGGCTGCATCTTCT 18

RESULT 837
ACA58076/c
ID ACA58076 standard; DNA; 21 BP.
AC
XX
XX
DT 20-MAY-2004 (first entry)
XX
XX
AC ACA58076;
XX
XX
09-JUN-2003 (first entry)
XX
XX
Human familial bipolar affective disorder chromosome marker primer #24.
XX
XX
Human; genotype determination; familial bipolar affective disorder;
KW chromosomal region linked; locus associated with resistance; D4S402;
KW D4S424; D4S431; D4S404; D11S394; D11S29; chromosome marker; primer; ss.
XX
XX
Homo sapiens.
OS
XX
US2002192655-A1.
XX
XX
19-DEC-2002.
XX
XX
13-JUN-2001; 2001US-00981012.
XX
XX
29-MAR-1996; 96US-0014334P.
PR
XX
20-OCT-1997; 97US-0062924P.
PR
XX
19-OCT-1998; 98US-00175158.
PR
XX
XX
(GINN/) GINN S E I.
PA
(EGEL/) EGELAND J A.
PA
(PAUL/) PAUL S M.
XX
XX
Ginn S E I, Egeland JA, Paul SM;
PI
XX
WPI; 2003-352708/33.
XX
XX
Determining a genotype associated with increased or decreased resistance
PT to familial bipolar affective disorder in a family comprises determining
PT the genotype of e.g., chromosomal regions D4S402 and D4S424.
XX
XX
Disclosure; Page 9; 79pp; English.
PS
XX
The present invention relates to a method of determining a genotype
CC associated with increased or decreased resistance to familial bipolar
CC affective disorder. The method comprises determining the genotype with at
CC least one marker of at least one chromosomal region linked to a locus
CC associated with resistance to bipolar affective disorder, where the
CC chromosomal regions are included of and localised between D4S402 and
CC D4S424, D4S431 and D4S404, or D11S394 and D11S29. The invention also
CC discloses a kit for determining a genotype associated with increased or
CC decreased resistance to familial bipolar affective disorder, where the
CC kit comprises markers for two or more of the chromosomal regions cited.
CC The method and kit are useful for determining a genotype associated with
CC increased or decreased resistance to familial bipolar affective disorder
CC in a family affected by bipolar affective disorder, for determining the
CC contribution of these chromosomal regions to bipolar affective disorder
CC in an affective family member, and for assessing an increased or
CC decreased risk of developing bipolar illness for a tested individual from
CC an affected family. ACA58053-ACA58292 represent primers used in the
CC present invention
XX
XX
Sequence 21 BP; 5 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 8.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 315 CTCTGCACACAGATT 330
DB 18 CTATGCACACAGATT 3
RESULT 838
ADJ13973

ADJ13973 standard; DNA; 21 BP.
ADJ13973;
20-MAY-2004 (first entry)
Human DNA probe used to immobilise CpG methylated DNA SeqID 1100.
probe; ss; chemical modification; methylation; array; CpG island;
tumour suppressor; p16; human; H69; H1618.
Homo sapiens.
US2003152950-A1.
14-AUG-2003.
27-JUN-2002; 2002US-00184085.
27-JUN-2001; 2001US-0301370P.
(GARN/) GARNER H R.
(MINN/) MINNA J D.
(LUEB/) LUEBKE K J.
(BALO/) BALOG R P.
Garner HR, Minna JD, Luebke KJ, Balog RP;
WPI; 2003-874843/81.
Analysis of chemical modification of DNA involves obtaining sample of DNA
to be analyzed, treating DNA with chemical reagents that result in
different base sequences, and determining sequence of resulting DNA.
Example 1; SEQ ID NO 1100; 210pp; English.
This invention relates to a novel method for analysing chemically
modified macromolecules. Specifically, it refers to a high throughput
method for the parallel analysis of many potential sites of chemical
modification (e.g. methylation) in DNA. The present invention describes
treating the DNA with one or more chemical reagents that result in
different base sequences depending upon the presence or absence of the
modification of interest. Accordingly, a device comprising an array of
probes is provided to hybridise with and select the altered DNA sequences
that comprise the modifications of interest such as a CpG island. In
particular, this invention refers to analysing the methylation pattern of
a region of the promoter for the tumour suppressor gene p16 from two
human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
is a human DNA probe used to immobilise CpG methylated DNA of the
invention.
Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 8.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 555 CCTCAGCGCGCGCTC 570
DB 4 CCTCAGCGCGCGCTC 19
RESULT 839
ADJ13935
ID ADJ13935 standard; DNA; 21 BP.
XX
XX
AC ADJ13935;
XX
XX
20-MAY-2004 (first entry)
XX
XX
Human DNA probe used to immobilise CpG methylated DNA SeqID 1062.
probe; ss; chemical modification; methylation; array; CpG island;
tumour suppressor; p16; human; H69; H1618.

KW tumour suppressor; p16; human; H69; H1618.
 XX Homo sapiens.
 OS US2003152950-A1.
 PN 14-AUG-2003.
 PD
 XX 27-JUN-2002; 2002US-00184085.
 PF 27-JUN-2001; 2001US-0301370P.
 XX (GARN/) GARNER H R.
 PA (MINN/) MINNA J D.
 PA (LUEB/) LUEBKE K J.
 PA (BALO/) BALOG R P.
 XX Garner HR, Minna JD, Luebke KJ, Balog RP;
 PI WPI; 2003-874843/81.
 DR
 XX Analysis of chemical modification of DNA involves obtaining sample of DNA
 PT to be analyzed, treating DNA with chemical reagents that result in
 PT different base sequences, and determining sequence of resulting DNA.
 XX Example 1; SEQ ID NO 1062; 210pp; English.
 PS This invention relates to a novel method for analysing chemically
 CC modified macromolecules. Specifically, it refers to a high throughput
 CC method for the parallel analysis of many potential sites of chemical
 CC modification (e.g. methylation) in DNA. The present invention describes
 CC treating the DNA with one or more chemical reagents that result in
 CC different base sequences depending upon the presence or absence of the
 CC modification of interest. Accordingly, a device comprising an array of
 CC probes is provided to hybridise with and select the altered DNA sequences
 CC that comprise the modifications of interest such as a CpG island. In
 CC particular, this invention refers to analysing the methylation pattern of
 CC a region of the promoter for the tumour suppressor gene p16 from two
 CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
 CC is a human DNA probe used to immobilise CpG methylated DNA of the
 CC invention.
 XX Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.4; DB 1; Length 21;
 Best Local Similarity 93.8%; Pred. No. 8.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 555 CCTCAGCGCGCGCTC 570
 |||||
 DB 6 CCTCAGCGCGCGCCC 21
 RESULT 840
 ADJ13972
 ID ADJ13972 standard; DNA; 21 BP.
 XX
 AC ADJ13972;
 XX 20-MAY-2004 (first entry)
 DT
 XX Human DNA probe used to immobilise CpG methylated DNA SeqID 1099.
 DE probe; ss; chemical modification; methylation; array; CpG island;
 KW tumour suppressor; p16; human; H69; H1618.
 KW Homo sapiens.
 OS US2003152950-A1.
 PN 14-AUG-2003.
 PD
 XX 27-JUN-2002; 2002US-00184085.
 PF

XX 27-JUN-2001; 2001US-0301370P.
 PR (GARN/) GARNER H R.
 PA (MINN/) MINNA J D.
 PA (LUEB/) LUEBKE K J.
 PA (BALO/) BALOG R P.
 XX Garner HR, Minna JD, Luebke KJ, Balog RP;
 PI WPI; 2003-874843/81.
 DR
 XX Analysis of chemical modification of DNA involves obtaining sample of DNA
 PT to be analyzed, treating DNA with chemical reagents that result in
 PT different base sequences, and determining sequence of resulting DNA.
 XX Example 1; SEQ ID NO 1099; 210pp; English.
 PS This invention relates to a novel method for analysing chemically
 CC modified macromolecules. Specifically, it refers to a high throughput
 CC method for the parallel analysis of many potential sites of chemical
 CC modification (e.g. methylation) in DNA. The present invention describes
 CC treating the DNA with one or more chemical reagents that result in
 CC different base sequences depending upon the presence or absence of the
 CC modification of interest. Accordingly, a device comprising an array of
 CC probes is provided to hybridise with and select the altered DNA sequences
 CC that comprise the modifications of interest such as a CpG island. In
 CC particular, this invention refers to analysing the methylation pattern of
 CC a region of the promoter for the tumour suppressor gene p16 from two
 CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
 CC is a human DNA probe used to immobilise CpG methylated DNA of the
 CC invention.
 XX Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.4; DB 1; Length 21;
 Best Local Similarity 93.8%; Pred. No. 8.4e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 555 CCTCAGCGCGCGCTC 570
 |||||
 DB 5 CCTCAGCGCGCGCCC 20
 RESULT 841
 ADJ13975
 ID ADJ13975 standard; DNA; 21 BP.
 XX
 AC ADJ13975;
 XX 20-MAY-2004 (first entry)
 DT
 XX Human DNA probe used to immobilise CpG methylated DNA SeqID 1102.
 DE probe; ss; chemical modification; methylation; array; CpG island;
 KW tumour suppressor; p16; human; H69; H1618.
 KW Homo sapiens.
 OS US2003152950-A1.
 PN 14-AUG-2003.
 PD
 XX 27-JUN-2002; 2002US-00184085.
 PF 27-JUN-2001; 2001US-0301370P.
 XX (GARN/) GARNER H R.
 PA (MINN/) MINNA J D.
 PA (LUEB/) LUEBKE K J.
 PA (BALO/) BALOG R P.
 XX Garner HR, Minna JD, Luebke KJ, Balog RP;
 PI

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XX DR WPI; 2003-874843/81.
XX
XX PT Analysis of chemical modification of DNA involves obtaining sample of DNA
XX PT to be analyzed, treating DNA with chemical reagents that result in
XX PT different base sequences, and determining sequence of resulting DNA.
XX PS Example 1; SEQ ID NO 1102; 210pp; English.
XX
XX CC This invention relates to a novel method for analysing chemically
XX CC modified macromolecules. Specifically, it refers to a high throughput
XX CC method for the parallel analysis of many potential sites of chemical
XX CC modification (e.g. methylation) in DNA. The present invention describes
XX CC treating the DNA with one or more chemical reagents that result in
XX CC different base sequences depending upon the presence or absence of the
XX CC modification of interest. Accordingly, a device comprising an array of
XX CC probes is provided to hybridise with and select the altered DNA sequences
XX CC that comprise the modifications of interest such as a CpG island. In
XX CC particular, this invention refers to analysing the methylation pattern of
XX CC a region of the promoter for the tumour suppressor gene p16 from two
XX CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
XX CC is a human DNA probe used to immobilise CpG methylated DNA of the
XX CC invention.
XX SQ Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.4; DB 1; Length 21;
XX Best Local Similarity 93.8%; Pred. No. 8.4e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 555 CCTCAGCGCGCGCTC 570
XX | | | | | | | | | |
XX Db 2 CCTCAGCGCGCGCCC 17
XX
XX RESULT 842
XX ADJ13976
XX ID ADJ13976 standard; DNA; 21 BP.
XX
XX AC ADJ13976;
XX
XX DT 20-MAY-2004 (first entry)
XX
XX DE Human DNA probe used to immobilise CpG methylated DNA SeqID 1103.
XX
XX KW probe; ss; chemical modification; methylation; array; CpG island;
XX KW tumour suppressor; p16; human; H69; H1618.
XX
XX OS Homo sapiens.
XX
XX PN US2003152950-A1.
XX
XX PD 14-AUG-2003.
XX
XX PF 27-JUN-2002; 2002US-00184085.
XX
XX PR 27-JUN-2001; 2001US-0301370P.
XX
XX PA (GARN/) GARNER H R.
XX PA (MINN/) MINNA J D.
XX PA (LUEB/) LUEBKE K J.
XX PA (BALO/) BALOG R P.
XX
XX PI Garner HR, Minna JD, Luebke KJ, Balog RP;
XX WPI; 2003-874843/81.
XX
XX DR Analysis of chemical modification of DNA involves obtaining sample of DNA
XX DR to be analyzed, treating DNA with chemical reagents that result in
XX DR different base sequences, and determining sequence of resulting DNA.
XX
XX PS Example 1; SEQ ID NO 1103; 210pp; English.
XX
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XX CC This invention relates to a novel method for analysing chemically
XX CC modified macromolecules. Specifically, it refers to a high throughput
XX CC method for the parallel analysis of many potential sites of chemical
XX CC modification (e.g. methylation) in DNA. The present invention describes
XX CC treating the DNA with one or more chemical reagents that result in
XX CC different base sequences depending upon the presence or absence of the
XX CC modification of interest. Accordingly, a device comprising an array of
XX CC probes is provided to hybridise with and select the altered DNA sequences
XX CC that comprise the modifications of interest such as a CpG island. In
XX CC particular, this invention refers to analysing the methylation pattern of
XX CC a region of the promoter for the tumour suppressor gene p16 from two
XX CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
XX CC is a human DNA probe used to immobilise CpG methylated DNA of the
XX CC invention.
XX SQ Sequence 21 BP; 2 A; 13 C; 3 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.4; DB 1; Length 21;
XX Best Local Similarity 93.8%; Pred. No. 8.4e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 555 CCTCAGCGCGCGCTC 570
XX | | | | | | | | | |
XX Db 1 CCTCAGCGCGCGCCC 16
XX
XX RESULT 843
XX ADJ13938
XX ID ADJ13938 standard; DNA; 21 BP.
XX
XX AC ADJ13938;
XX
XX DT 20-MAY-2004 (first entry)
XX
XX DE Human DNA probe used to immobilise CpG methylated DNA SeqID 1065.
XX
XX KW probe; ss; chemical modification; methylation; array; CpG island;
XX KW tumour suppressor; p16; human; H69; H1618.
XX
XX OS Homo sapiens.
XX
XX PN US2003152950-A1.
XX
XX PD 14-AUG-2003.
XX
XX PF 27-JUN-2002; 2002US-00184085.
XX
XX PR 27-JUN-2001; 2001US-0301370P.
XX
XX PA (GARN/) GARNER H R.
XX PA (MINN/) MINNA J D.
XX PA (LUEB/) LUEBKE K J.
XX PA (BALO/) BALOG R P.
XX
XX PI Garner HR, Minna JD, Luebke KJ, Balog RP;
XX WPI; 2003-874843/81.
XX
XX DR Analysis of chemical modification of DNA involves obtaining sample of DNA
XX DR to be analyzed, treating DNA with chemical reagents that result in
XX DR different base sequences, and determining sequence of resulting DNA.
XX
XX PS Example 1; SEQ ID NO 1065; 210pp; English.
XX
XX CC This invention relates to a novel method for analysing chemically
XX CC modified macromolecules. Specifically, it refers to a high throughput
XX CC method for the parallel analysis of many potential sites of chemical
XX CC modification (e.g. methylation) in DNA. The present invention describes
XX CC treating the DNA with one or more chemical reagents that result in
XX CC different base sequences depending upon the presence or absence of the
XX CC modification of interest. Accordingly, a device comprising an array of
XX CC probes is provided to hybridise with and select the altered DNA sequences
XX CC that comprise the modifications of interest such as a CpG island. In
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CC particular, this invention refers to analysing the methylation pattern of
CC a region of the promoter for the tumour suppressor gene p16 from two
CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
CC is a human DNA probe used to immobilise CpG methylated DNA of the
CC invention.

XX Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 8.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 555 CCTCAGCCGCGGCTC 570
Db 3 CCTCAGCCGCGGCCC 18

RESULT 844

ADK95204
ID ADK95204 standard; DNA; 21 BP.

XX AC ADK95204;

XX DT 06-MAY-2004 (first entry)

XX DE Primer of the invention #924.

XX KW human; single nucleotide polymorphism; SNP; ss; primer.

XX OS Synthetic.

XX PN JP2003259875-A.

XX PD 16-SEP-2003.

XX PF 08-MAR-2002; 2002JP-00064373.

XX PR 08-MAR-2002; 2002JP-00064373.

XX PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.

XX DR WPI; 2004-093977/10.

XX PT Novel polynucleotide useful for PCR amplification along with two DNA
XX fragment from another set of sequences, or for detecting single
XX nucleotide polymorphism in human gene.

PS Claim 2; SEQ ID NO 4233; 2627pp; Japanese.

CC The present invention relates to a polynucleotide isolated from a human
CC gene and is useful for detecting a single nucleotide polymorphism in a
CC human gene or for diagnosing of disease. The invention enables the
CC detection of a single nucleotide polymorphism in a human gene. The
CC present sequence represents a primer of the invention.

XX Sequence 21 BP; 5 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 8.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 885 TGGGAACATCATCAAC 900
Db 1 TGGGAACATCATCATC 16

RESULT 845

ADK97027/c
ID ADK97027 standard; DNA; 21 BP.

XX AC ADK97027;

XX DT 06-MAY-2004 (first entry)

XX Primer of the invention #2747.
DE human; single nucleotide polymorphism; SNP; ss; primer.
XX OS Synthetic.

XX PN JP2003259875-A.

XX PD 16-SEP-2003.

XX PF 08-MAR-2002; 2002JP-00064373.

XX PR 08-MAR-2002; 2002JP-00064373.

XX PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.

XX DR WPI; 2004-093977/10.

XX PT Novel polynucleotide useful for PCR amplification along with two DNA
XX fragment from another set of sequences, or for detecting single
XX nucleotide polymorphism in human gene.

PS Claim 2; SEQ ID NO 6056; 2627pp; Japanese.

CC The present invention relates to a polynucleotide isolated from a human
CC gene and is useful for detecting a single nucleotide polymorphism in a
CC human gene or for diagnosing of disease. The invention enables the
CC detection of a single nucleotide polymorphism in a human gene. The
CC present sequence represents a primer of the invention.

XX Sequence 21 BP; 3 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 8.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1303 GAGTTCAGACATACA 1318
Db 16 GAGTTCAGACATACA 1

RESULT 846

AAT97858

ID AAT97858 standard; DNA; 22 BP.

XX AC AAT97858;

XX DT 09-MAR-1998 (first entry)

XX DE PCR primer 7 for DNA encoding chimeric Ewing's sarcoma-WT1 protein.

XX KW Ewing's sarcoma; EWS; EWS-WT1 protein; peripheral neuroectodermal tumour;
XX PNET; breakpoint locus; Wilms' tumour;
XX desmoplastic small round cell tumour; DSRC tumour; PCR primer; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN US5670317-A.

XX PD 23-SEP-1997.

XX PF 08-MAY-1995; 95US-00437027.

XX PR 08-MAY-1995; 95US-00437027.

XX PA (SLOK) SLOAN KETTERING INST CANCER RES.

XX PI Ladanyi M, Gerald W;

XX DR WPI; 1997-479448/44.

XX

PT Diagnosis of desmoplastic small round cell tumours - by detecting nucleic
 PT acid encoding chimeric EMS-WT1 protein.

XX Disclosure; Col 29; 34pp; English.

XX Oligonucleotides AAT97852-68 are used both as PCR primers (in reverse
 CC transcriptase PCR), and probes for the detection of DNA encoding a
 CC chimeric Ewing's sarcoma (EMS)-WT1 protein. EMS is also known as
 CC peripheral neuroectodermal tumour (PNET). WT1 was screened as a
 CC breakpoint locus because of its involvement in Wilms' tumour, which
 CC shares some histopathologic features of desmoplastic small round cell
 CC (DSRC) tumours. The EMS-WT1 chimeric transcript has been detected in 11
 CC out of 12 DSRC tumours studied and in none of 49 other tumours. DSRC
 CC tumours are associated with translocation of the EMS gene. The present
 CC oligonucleotide is complementary to the WT1 intron 5', to exon 7, and is
 CC used in a method for the diagnosis of DSRC tumours in patients. The
 CC method comprises detecting a nucleic acid molecule encoding a chimeric
 CC EMS-WT1 protein in a sample from the subject, where positive detection
 CC indicates the presence of a DSRC tumour

XX Sequence 22 BP; 1 A; 10 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;
 Best Local Similarity 93.8%; Pred. No. 8.7e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1697 CTTACTCTCTCGCTAC 1712

DB 7 CTTACTCTCTCGCTGC 22

RESULT 847

AA09130/C

ID AA09130 standard; DNA; 22 BP.

XX AC AA09130;

DT 24-MAR-1999 (first entry)

DE Human biallelic polymorphic marker upstream primer #10.

XX Polymorphism; biallelic; human; forensic; paternity testing; disease;
 KW detection; phenotypic typing; characteristic; infection; hereditary;
 KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;
 KW treatment; marker; primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9820165-A2.

PN 14-MAY-1998.

PD 05-NOV-1997; 97WO-US020313.

XX 06-NOV-1996; 96US-0030455P.

PR (WHED) WHITEHEAD INST BIOMEDICAL RES.

XX Lander ES, Wang D, Hudson T;

XX WPI; 1998-286974/25.

XX New isolated nucleic acid segments from the human genome - used for
 PT determining polymorphic forms for use in e.g. forensics, paternity
 PT testing or phenotypic typing for disease.

PS Claim 15; Page 47; 310pp; English.

XX AA09121-X10268 are allele-specific oligonucleotide primers used in the
 CC isolation of various biallelic polymorphic markers found in the human
 CC genome (represented in AA010269-X12937). These primers can be used in a
 CC method for determining polymorphic forms in an individual for use in e.g.

CC forensics, paternity testing or for phenotypic typing for diseases such
 CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
 CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
 CC hypercholesterolemia, polycystic kidney disease, hereditary
 CC spherocytosis, von Willebrand's disease, tuberosus sclerosis, hereditary
 CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
 CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,
 CC autoimmune diseases, inflammation, cancer, diseases of the nervous
 CC system, infection by pathogenic microorganisms, and characteristics such
 CC as longevity, appearance (e.g. baldness, obesity), strength, speed,
 CC endurance, fertility, and susceptibility or receptivity to particular
 CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid
 CC segments can also be used to produce medicaments for the treatment or
 CC prophylaxis of such diseases

XX Sequence 22 BP; 9 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;

Best Local Similarity 93.8%; Pred. No. 8.7e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1457 TCTTCCTCAGTCTGGG 1472

DB 16 TCTTCCTCAGTCTGTG 1

RESULT 848

AAV32818

ID AAV32818 standard; DNA; 22 BP.

XX AC AAV32818;

DT 26-OCT-1998 (first entry)

DE Reverse primer for Staphylococcus aureus pcp34 gene.

XX collagen adhesin gene; cna; primer; PCR; amplification; cnaB;

KW cna-up gene; fibronectin binding protein A gene; fnbA; fnbB; beta-toxin;

KW pcp gene; pcp12 gene; pcp34 gene; hlb; biotyping;

KW southern blot hybridisation; insertion sequence typing;

KW plasmid profile analysis; ss.

XX Synthetic.

OS Staphylococcus aureus.

XX US5789171-A.

XX 04-AUG-1998.

XX 20-JUN-1996; 96US-00667079.

XX 20-JUN-1996; 96US-00667079.

XX (UYAR-) UNIV ARKANSAS.

XX Smeltzer MS;

XX WPI; 1998-446070/38.

XX Differentiating clinical Staphylococcus aureus strains - uses Southern
 PT blot probes for specific genes that determine genomic organisation.

XX Example 8; Fig 7; 25pp; English.

XX Reverse and forward (AAV32817) primers were used to amplify the
 CC Staphylococcus aureus pcp34 gene. The PCR product was used as a probe in
 CC the method of the invention. The invention provides a method of
 CC differentiating clinical isolates of S. aureus in isolated genomic DNA
 CC samples. The method involves digesting the samples with a restriction
 CC enzyme followed by southern blot hybridisation, using DNA probes selected
 CC from at least two S. aureus genes, to produce a hybridisation profile
 CC which is capable of differentiating S. aureus clinical isolates. The S.
 CC aureus genes used as genotypic markers were the collagen adhesin (cna)

CC gene, cnaB gene, cna-up gene, fibronectin binding protein A (fnbA) gene,
 CC fnbB gene, beta-toxin (hib) gene, pcg gene, pcpl2 gene and the pcpl34
 CC gene. This polymorphic based genetic identification method has proved
 CC more specific in identifying epidemiologically related strains than,
 CC previous techniques, including polymerase chain reaction, biotyping,
 CC insertion sequence typing and plasmid profile analysis
 XX
 SQ Sequence 22 BP; 8 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;
 Best Local Similarity 93.8%; Pred. No. 8.7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1306 TTCACAGACATACAACT 1321
 Db 5 TCCACAGACATACAACT 20

RESULT 849
 AAH49379
 ID AAH49379 standard; DNA; 22 BP.
 XX
 AC AAH49379;
 XX
 DT 30-NOV-2001 (first entry)
 XX
 DE Human papilloma virus E6 PCR primer 33WE51.
 XX
 KW PCR primer; E6; dedifferentiation; micro-metastasis; cancer cell;
 KW cytodiagnostic; cervical carcinoma; ss.
 XX
 OS Human papillomavirus.
 XX
 PN DE10109259-A1.
 XX
 PD 13-SEP-2001.
 XX
 PF 26-FEB-2001; 2001DE-01009259.
 XX
 PR 25-FEB-2000; 2000DE-01009081.
 XX
 PA (GIES/) GIESING M.
 XX
 DR WPI; 2001-607957/70.
 XX

PT Characterizing increased dedifferentiation of cancer cells useful for
 PT diagnosing cancer, particularly early cervical cancer, comprises applying
 PT body fluids to a foil covered slide and detecting dye-marked cells by
 PT laser.
 XX
 PS Example 2; Page 14; 18pp; German.
 XX

CC This invention describes a novel method for characterizing increased
 CC dedifferentiation and micro-metastasis of cancer cells, comprising
 CC applying body fluid cells to a carrier and cytodiagnostically examining
 CC its cells using micro-dissection to separate cytodiagnostically
 CC distinguishable cells from normal cells and performing at least one gene
 CC analysis on the separated cells. The method is used to diagnose cancer,
 CC particularly for the early recognition of cervical carcinoma. This
 CC sequence represents a PCR primer used in the amplification of the human
 CC Papilloma virus E6 gene used to illustrate the method of the invention
 XX
 SQ Sequence 22 BP; 5 A; 11 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;
 Best Local Similarity 93.8%; Pred. No. 8.7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 771 GGACCTCAACACGCC 786
 Db 3 GGACCTCAACACGCC 18

RESULT 850
 ACC82981

ID ACC82981 standard; DNA; 22 BP.

XX ACC82981;

XX 27-OCT-2003 (revised)

DT 27-AUG-2003 (first entry)

XX Outer reverse PCR primer used to sequence HIV-1 tat gene.

XX Regulatory gene; accessory gene; HIV; human immunodeficiency virus;
 KW vaccine; infection; gene therapy; tat; PCR; primer; ss.

XX Human immunodeficiency virus 1.

XX WO2003037919-A2.

XX 08-MAY-2003.

XX 31-OCT-2002; 2002WO-1B004550.

XX 31-OCT-2001; 2001ZA-00008978.

XX (SAME-) SOUTH AFRICAN MEDICAL RES COUNCIL.

XX (UYCA-) UNIV CAPE TOWN.

XX Williamson C, Van Harmelen JH, Gray CM, Bourn W, Karim SA;

XX WPI; 2003-430497/40.

XX New molecules comprising HIV-1 subtype isolate regulatory/accessory
 PT genes, useful for manufacturing a vaccine for treating or preventing HIV
 PT infection.

XX Disclosure; Page 20; 97pp; English.

XX The invention relates to molecules comprising HIV-1 subtype isolate
 CC regulatory/accessory genes (tat, nef and rev genes) and modifications and
 CC derivatives thereof. The invention also provides proteins encoded by such
 CC genes. Sequences of the invention are useful for manufacturing vaccines
 CC for treating or preventing human immunodeficiency virus (HIV) infections.
 CC They are also useful in gene therapy. The present sequence is a PCR
 CC primer used to sequence HIV-1 tat gene. Note: This sequence is stated to
 CC be the same as that shown as SEQ ID NO: 23 in sequence listing. However
 CC this sequence has an additional base at its 3' end. (Updated on 27-OCT-
 CC 2003 to standardise OS field)

XX Sequence 22 BP; 5 A; 11 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;

Best Local Similarity 93.8%; Pred. No. 8.7e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 528 CCTCAATAGCCCATC 543

Db 1 CCTCAATATCCCATC 16

RESULT 851

ADB80421

ID ADB80421 standard; DNA; 22 BP.

XX ADB80421;

XX 04-DEC-2003 (first entry)

XX Rat CLCA1 gene PCR primer #8.

XX ss; primer; antiinflammatory; antiasthmatic; antiallergic; CLCA1;
 KW calcium activated chloride channel protein; chest disorder;
 KW airway disorder; chronic obstructive lung disease; chronic bronchitis;
 KW bronchial asthma; rhinitis; hay fever; pneumonia.

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XX OS Rattus sp.
XX XX
XX PN WO2003037927-A1.
XX XX
XX PD 08-MAY-2003.
XX XX
XX PF 01-NOV-2002; 2002WO-JP011417.
XX XX
XX PR 02-NOV-2001; 2001JP-00337864.
XX PR 13-DEC-2001; 2001JP-00380099.
XX PR 18-JAN-2002; 2002JP-00010035.
XX XX
XX PA (TAKE ) TAKEDA CHEM IND LTD.
XX XX
XX PI Nakanishi A, Morita S;
XX XX
XX DR WPI; 2003-430500/40.
XX XX
XX PT Rat CLCA1 gene and protein encoded by it useful for screening inhibitors
XX PT of its activity and expression and as chronic obstructive lung disease
XX PT and bronchial asthma remedies.
XX XX
XX PS Example 2; Page 97; 115pp; Japanese.
XX CC The invention relates to proteins and their salts and partial peptides
XX CC which are the expression product of the rat CLCA1 gene or are related
XX CC proteins with similar activity. CLCA1 is a calcium activated chloride
XX CC channel protein. The proteins are useful for the treatment, prevention
XX CC and diagnosis of chest and airway disorders including chronic obstructive
XX CC lung disease, chronic bronchitis, bronchial asthma, chronic rhinitis,
XX CC acute rhinitis, allergic rhinitis, hay fever and pneumonia. This sequence
XX CC corresponds to a PCR primer used to isolate and clone the rat CLCA1 gene
XX CC (ADB80434).
XX XX
XX SQ Sequence 22 BP; 6 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;
Best Local Similarity 93.8%; Pred. NO. 8.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 672 AAGCAAGCTCAGAC 687
   |||||
Db 3 AAGCGAGCTCAGAC 18

RESULT 852
ADH28100
ID ADH28100 standard; DNA; 22 BP.
XX AC ADH28100;
XX XX
XX DT 11-MAR-2004 (first entry)
XX XX
XX DE Human chromosome 1 SNP PCR primer.
XX XX
XX KW genetic alteration; diagnosis; malignant disease; tumour; metastasis;
XX KW single nucleotide polymorphism; SNP; cancer; PCR primer; detection;
XX KW human; chromosome 1; ss.
XX OS Synthetic.
XX XX
XX PN WO2004001016-A2.
XX XX
XX PD 31-DEC-2003.
XX XX
XX PF 25-JUN-2003; 2003WO-US019926.
XX XX
XX PR 25-JUN-2002; 2002US-0391515P.
XX PA (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
XX PA Fortina P, Maris JM, Gelfand CA;
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XX WPI; 2004-071731/07.
XX DR
XX PT Detecting genetic alterations associated with cancer comprises providing
XX PT a target nucleic acid from a patient sample having a predetermined
XX PT sequence in the normal population, and assessing the nucleic acid for
XX PT loss of heterozygosity.
XX XX
XX PS Example 1; SEQ ID NO 219; 50pp; English.
XX XX
XX CC The present invention describes a method for determining a genetic
XX CC alteration in a nucleic acid for the diagnosis and management of
XX CC malignant disease. The method comprises providing a target nucleic acid
XX CC from a patient sample, the target nucleic acid having a predetermined
XX CC sequence in the normal population; and assessing the target nucleic acid
XX CC for the extent of loss of heterozygosity relative to predetermined loci,
XX CC an increased loss of heterozygosity being correlated with enhanced tumour
XX CC invasiveness and metastasis. Also described is a method for determining
XX CC the presence or absence of at least one specific nucleotide in a target
XX CC nucleic acid for the diagnosis and management of malignant disease. The
XX CC methods are useful in detecting genetic alterations (e.g. single
XX CC nucleotide polymorphisms (SNPs)) in a defined polynucleotide region as a
XX CC means to diagnose and manage malignant diseases such as cancer. The
XX CC present sequence represents a PCR primer used to amplify genomic DNA
XX CC corresponding to known SNPs located in predetermined regions of human
XX CC chromosome 1, which is used in an example from the present invention.
XX XX
XX SQ Sequence 22 BP; 8 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;
Best Local Similarity 93.8%; Pred. NO. 8.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 402 GCAGTCTCCAGTGAGA 417
   |||||
Db 5 GAAGTCTCCAGTGAGA 20

RESULT 853
AD129505
ID AD129505 standard; DNA; 22 BP.
XX AC AD129505;
XX XX
XX DT 22-APR-2004 (first entry)
XX XX
XX DE Rat CLCA1 RT- PCR primer 1 SEQ ID NO:10.
XX XX
XX KW rat; airway epithelial cell; calcium-activated chloride channel; CLCA;
XX KW antiasthmatic; antiallergic; antiinflammatory; respiratory disorder;
XX KW chronic obstructive lung disease; asthma; hayfever; cystic fibrosis;
XX KW pulmonary fibrosis; pneumonia; primer; ss; RT-PCR.
XX OS Rattus sp.
XX XX
XX PN WO2004005495-A1.
XX XX
XX PD 15-JAN-2004.
XX XX
XX PF 03-JUL-2003; 2003WO-JP008486.
XX XX
XX PR 05-JUL-2002; 2002JP-00196915.
XX XX
XX PA (TAKE ) TAKEDA CHEM IND LTD.
XX XX
XX PI Nakanishi A, Iwashita H, Morita S;
XX XX
XX DR WPI; 2004-108820/11.
XX XX
XX PT Rat airway epithelial cell line NIM-1 expressing a calcium-activated
XX PT chloride channel protein for screening chloride channel inhibitors as
XX PT agents for treatment of respiratory disease including chronic obstructive
XX PT lung disease and asthma.
```

XX Example 3; SEQ ID NO 10; 140pp; Japanese.
XX
CC The invention relates to novel rat airway epithelial cell lines
CC expressing a calcium-activated chloride channel protein (ClCA). A cell
CC line of the invention has antiasthmatic, antiallergic, and
CC antiinflammatory activity. The invention is useful for the treatment and
CC prevention of respiratory disorders, including chronic obstructive lung
CC disease, asthma (including chronic and acute asthma and allergic asthma),
CC hayfever, cystic fibrosis, pulmonary fibrosis and pneumonia. The present
CC sequence is used in the exemplification of the invention.
XX
SQ Sequence 22 BP; 6 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;
Best Local Similarity 93.8%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 672 AAGCAAGCTCACAGAC 687
|||||
Db 3 AAGCGAGCTCACAGAC 18

RESULT 854
ADP18593/c
ID ADP18593 standard; DNA; 22 BP.

AC ADP18593;

XX 29-JUL-2004 (first entry)

XX Antisense compound design-related oligonucleotide SeqID17.

XX antisense compound; all-RNA fraction; expression; antisense effect;
KW antiangiogenic; vasopermeability; antisense therapy; angiogenesis; ss.

XX Unidentified.

XX JP2004129650-A.

XX 30-APR-2004.

XX 11-AUG-2003; 2003JP-00291071.

XX 13-AUG-2002; 2002JP-00235849.

XX (SANY) SANKYO CO LTD.

XX WPI; 2004-395159/37.

XX Designing antisense compound, by inputting oligonucleotide with antisense
PT effect to target gene, extracting RNA, analyzing gene expression,
PT modifying oligonucleotide to produce antisense effect.

XX Disclosure; SEQ ID NO 17; 67pp; Japanese.

XX This invention relates to a method of designing an antisense compound.
CC The method includes extracting the all-RNA fraction from a cell,
CC incubated with or without the oligonucleotide, and analysing the
CC difference in expression of the gene output to ascertain whether an
CC oligonucleotide produces an antisense effect against the target gene. The
CC method may be useful for the production of compounds with an
CC antiangiogenic activity acting as enhancers of vasopermeability whilst
CC the disclosed sequences may be used for antisense therapy. The compounds
CC developed may be used to treat or prevent angiogenesis. The method can be
CC carried out to reduce expression of a target gene without affecting other
CC genes. The present sequence is that of an oligonucleotide which is
CC related to the method of the invention. Note: This sequence does not
CC appear in the specification but was obtained in electronic format from
CC the Japanese patent office.

XX Sequence 22 BP; 5 A; 10 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;
Best Local Similarity 93.8%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1025 AGCTGGCTGACTTTGG 1040
|||||
Db 20 AGCTGGCTGACTTTGG 5

RESULT 855

ADO59314/c

ID ADO59314 standard; DNA; 22 BP.

XX ADO59314;

XX 26-AUG-2004 (first entry)

XX Mouse kank (mkank) gene-specific PCR primer #8.

XX mouse; murine; kank; mkank; cancer; PCR; primer; ss.

XX Mus musculus.

XX WO2004048568-A1.

XX 10-JUN-2004.

XX 21-NOV-2003; 2003WO-JP014930.

XX 22-NOV-2002; 2002JP-00339909.

XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.

XX (INFO-) INFO GENES CO LTD.

XX Kiyama R, Kitajima K;

XX WPI; 2004-450380/42.

XX Novel mouse kank protein useful for detecting cancer, treating cancer, in
PT drug discovery for treating cancer.

XX Example 1; SEQ ID NO 11; 83pp; Japanese.

XX The invention comprises the amino acid and coding sequence of the mouse
CC kank (mkank) protein. The DNA and protein sequences of the invention are
CC useful in the detection and treatment of cancer. The present DNA sequence
CC represents a PCR primer for the mouse kank gene.

XX Sequence 22 BP; 4 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;
Best Local Similarity 93.8%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 888 GAACATCATCAACATG 903

Db 22 GTACATCATCAACATG 7

RESULT 856

AAT11978/c

ID AAT11978 standard; DNA; 19 BP.

XX AAT11978;

XX 25-MAR-2003 (revised)

XX 13-MAR-1996 (first entry)

XX CMV antisense oligonucleotide (ISIS 5481).

XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.


```
OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..19
FT /*tag= a
FT /*note= "phosphorothioate backbone"
XX
XX US5442049-A.
XX
XX 15-AUG-1995.
XX
XX 25-JAN-1993; 93US-00009263.
XX
XX 19-NOV-1992; 92US-00927506.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker B, Draper K, Anderson K;
XX WPI; 1995-292538/38.
XX
XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
XX a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
XX treatment of CMV diseases.
XX
XX Example 10; Col 17; 66pp; English.
XX
XX AAT11971-84 are antisense oligonucleotides (ONs) against human
XX cytomegalovirus (CMV) that displayed activities of at least 50 % of
XX control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
XX mismatches could be tolerated without loss of antiviral activity.
XX Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA
XX polymerase proteins have been shown to be effective in therapy,
XX prophylaxis and diagnosis of CMV infection. The ONs may be modified to
XX reduce nuclease resistance and to increase their efficacy. Modifications
XX include phosphorothioate backbones, alkyl and halogen-substituted sugar
XX moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF
XX field.)
XX
XX Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAAAAC 148
Db ||| ||||| |||||
19 GCGAAGAAGAAGAGCAAAAC 1
RESULT 857
AAT11971/c
ID AAT11971 standard; DNA; 19 BP.
XX
XX AAT11971;
AC
XX
XX 25-MAR-2003 (revised)
DT 13-MAR-1996 (first entry)
XX
XX CMV antisense oligonucleotide (ISIS 4376).
DE
XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
XX intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
XX
XX Synthetic.
OS
XX Key Location/Qualifiers
FH modified_base 1..19
FT /*tag= a
FT /*note= "Phosphorothioate backbone"
XX
XX US5442049-A.
XX
XX 15-AUG-1995.
XX
XX 25-JAN-1993; 93US-00009263.
XX
XX 19-NOV-1992; 92US-00927506.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker B, Draper K, Anderson K;
XX WPI; 1995-292538/38.
XX
XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
XX a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
XX treatment of CMV diseases.
XX
XX Example 10; Col 17; 66pp; English.
XX
XX AAT11971-84 are antisense oligonucleotides (ONs) against human
XX cytomegalovirus (CMV) that displayed activities of at least 50 % of
XX control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
XX mismatches could be tolerated without loss of antiviral activity.
XX Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA
XX polymerase proteins have been shown to be effective in therapy,
XX prophylaxis and diagnosis of CMV infection. The ONs may be modified to
XX reduce nuclease resistance and to increase their efficacy. Modifications
XX include phosphorothioate backbones, alkyl and halogen-substituted sugar
XX moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF
XX field.)
XX
XX Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 130 CGGATGAAGAAGATCAAAAC 148
Db ||| ||||| |||||
19 GCGAAGAAGAAGAGCAAAAC 1
RESULT 858
AAT01679/c
ID AAT01679 standard; DNA; 19 BP.
XX
XX AAT01679;
AC
XX
XX 17-DEC-1995 (first entry)
DT
XX
XX Peptide nucleic acid targetting CMV IE2 nuc sig 2.
DE
XX peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
XX antiviral; diagnostic; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..19
FT /*tag= a
FT /*note= "at least one (and preferably all) of the backbone
FT subunits are composed of amide units, so that the
FT oligomer consists of the nucleobases attached covalently
FT to a polyamide backbone"
XX
XX WO9504748-A1.
XX
XX 16-FEB-1995.
XX
XX 09-AUG-1994; 94WO-US0009039.
XX
XX 09-AUG-1993; 93US-00104438.
XX
```

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PD 15-AUG-1995.
XX
XX 25-JAN-1993; 93US-00009263.
XX
XX 19-NOV-1992; 92US-00927506.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker B, Draper K, Anderson K;
XX WPI; 1995-292538/38.
XX
XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
XX a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
XX treatment of CMV diseases.
XX
XX Example 10; Col 17; 66pp; English.
XX
XX AAT11971-84 are antisense oligonucleotides (ONs) against human
XX cytomegalovirus (CMV) that displayed activities of at least 50 % of
XX control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
XX mismatches could be tolerated without loss of antiviral activity. ISIS
XX 4376 is a 19-mer antisense ON related to ISIS 2292, but with one
XX nucleotide removed from each end. Antisense ONs targeting CMV DNA or RNA
XX coding for the IE1, IE2 or DNA polymerase proteins have been shown to be
XX effective in therapy, prophylaxis and diagnosis of CMV infection. The ONs
XX may be modified to reduce nuclease resistance and to increase their
XX efficacy. Modifications include phosphorothioate backbones, alkyl and
XX halogen-substituted sugar moieties at the 2' position. (Updated on 25-MAR-
XX -2003 to correct PF field.)
XX
XX Sequence 19 BP; 0 A; 6 C; 3 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 131 GGATGAAGAAGATCAAAACG 149
Db ||| ||||| |||||
19 GCAAGAAGAAGAGCAAAACG 1
RESULT 858
AAT01679/c
ID AAT01679 standard; DNA; 19 BP.
XX
XX AAT01679;
AC
XX
XX 17-DEC-1995 (first entry)
DT
XX
XX Peptide nucleic acid targetting CMV IE2 nuc sig 2.
DE
XX peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
XX antiviral; diagnostic; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..19
FT /*tag= a
FT /*note= "at least one (and preferably all) of the backbone
FT subunits are composed of amide units, so that the
FT oligomer consists of the nucleobases attached covalently
FT to a polyamide backbone"
XX
XX WO9504748-A1.
XX
XX 16-FEB-1995.
XX
XX 09-AUG-1994; 94WO-US0009039.
XX
XX 09-AUG-1993; 93US-00104438.
XX
```


PT to enrich for fragments contg. the repeats before cloning and
 PT rescreening, also simple tandem repeats for treatment or diagnosis.
 XX
 PS Claim 25; Page 36; 51pp; English.

XX AAQ95226 and AAQ95227 are a primer pair for the PCR amplification of the
 CC simple tandem repeat (STR) corresponding to wg1a3. The STR can be used
 CC for treatment and diagnosis in human and veterinary medicine, partic. for
 CC genetic characterisation, mapping, linkage studies and analysis/diagnosis
 CC of acquired disease alleles

XX Sequence 19 BP; 3 A; 9 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 8.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1446 GAACATCCATCTTCCTC 1464

DB 1 GATCCATCCATCTTCCTC 19

RESULT 861

AAT10879

ID AAT10879 standard; DNA; 19 BP.

XX AC AAT10879;

XX DT 06-SEP-1996 (first entry)

XX Human cytochrome P4501A2 (CYP1A2) gene PCR amplification primer.
 XX Cytochrome P450; detection; diagnosis; polymorphism; substitution;
 KW metabolism; respiration; polymerase chain reaction; ss.
 XX Synthetic.

XX WO9601328-A1.

XX PD 18-JAN-1996.

XX PF 06-JUL-1995; 95WO-JP001352.

XX PR 06-JUL-1994; 94JP-00154571.

XX PA (SAKA) OTSUKA PHARM CO LTD.

XX PA (KIMS/) KIM S.

XX PA (SHIN/) SHIN K.

XX PA (SHIN/) SHIN J.

XX PI Fukui T, Katsuragi K, Kinoshita M;
 XX WPI; 1996-087678/09.

XX Detection of human cytochrome p4501A2 gene polymorphism - useful in gene
 XX diagnosis of metabolic activity polymorphism.

XX Example 1; Page 8; 23pp; Japanese.

XX AAT10877-T10898 are PCR primers used for the amplification of the human
 CC cytochrome P4501A2 gene. They are used in a method for detecting
 CC cytochrome P4501A2 gene polymorphism, in partic. for detecting a T to G
 CC base substitution at position 2064 or a C to A substitution at position
 CC 2640. The method is easy, convenient and has a high degree of sensitivity
 CC and accuracy. Polymorphisms in the P4501A2 gene can lead to a
 CC modification of metabolism which may be beneficial or deleterious

XX Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 8.4e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 270 ACGTCTGCTCTCTGGGAA 288

DB 1 ATGTCTGACCTTGGGAA 19

RESULT 862

ADG77403

ID ADG77403 standard; DNA; 19 BP.

XX AC ADG77403;

XX DT 11-MAR-2004 (first entry)

XX Canine disease marker-related PCR primer 247.
 XX genetic disease; genetic trait; dog; carrier of recessive disease;
 KW copper toxicosis; CT; canine genome map; breed-specific profile;
 KW DNA fingerprint; dog identification; PCR; primer; ss.
 XX Canis familiaris.

XX WO9731011-A1.

XX PD 28-AUG-1997.

XX PF 18-FEB-1997; 97WO-US002396.

XX PR 22-FEB-1996; 96US-0012060P.

XX PA (UNMI) UNIV MICHIGAN.

XX PA (UNMS) UNIV MICHIGAN STATE.

XX PI Brewer GJ, Venta PJ, Yuzbasiyan-Gurkan V;

XX WPI; 1997-435082/40.

XX New oligonucleotide primers for diagnosis of genetic diseases and traits
 PT in dogs - amplify specific regions of the genome containing
 PT microsatellite repeats, especially for diagnosing copper toxicosis and
 PT carriers.

XX Claim 1; Page 14; 40pp; English.

XX This invention relates to novel oligonucleotide PCR primers which may be
 CC used to identify markers associated with genetic diseases and traits in
 CC dogs, in particular to diagnose genetic diseases that are not
 CC phenotypically visible and to identify carriers of recessive diseases. A
 CC specific application is diagnosis of copper toxicosis (CT). The invention
 CC can also be used to create a genetic map of the canine genome; to
 CC generate breed-specific profiles; to establish paternity and to identify
 CC dogs from DNA fingerprints. The method provides rapid analysis of the
 CC target sequences from only a small sample of DNA. Diagnosis can be done
 CC at any time in the dog's life. The present sequence is that of a PCR
 CC primer of the invention.

XX Sequence 19 BP; 4 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 8.4e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 594 TGGCTTTGGGAACCTGGAG 612

DB 1 TGACCTTGGGAAGCTGGAG 19

RESULT 863

AAV41067/c

ID AAV41067 standard; DNA; 19 BP.

XX AC AAV41067;

XX DT 25-SEP-1998 (first entry)

```

XX DE Primer TEL:114U19 for abnormality detection.
XX KW PCR primer; chromosomal abnormality; abnormality detection; leukaemia;
XX KW lymphoma; carcinoma; adenocarcinoma; sarcoma; glioma; neuroblastoma;
XX KW medullablastoma; malignant melanoma; malignant neoplastic condition; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9824928-A2.
XX PD 11-JUN-1998.
XX PF 08-DEC-1997; 97WO-DK000556.
XX PX 06-DEC-1996; 96DK-00001401.
XX PA (PALL/) PALLISGAARD N.
XX PI Pallisgaard N, Hokland P;
XX PX WPI; 1998-333344/29.
XX CC Detection of chromosomal abnormalities - by subjecting patient sample
XX PT nucleic acids to a multiplex molecular amplification procedure using
XX PT primers specific for characteristic nucleic acid sequence.
XX PS Claim 73; Page 107; 126pp; English.
XX CC This sequence represents a primer used in the method of the invention for
XX CC the detection of the presence or absence of chromosomal abnormalities,
XX CC each abnormality being associated with a condition in a subject and each
XX CC being defined by at least one characteristic nucleic acid sequence. The
XX CC method comprises: (a) obtaining a sample of nucleic acids derived from a
XX CC subject which may harbour one of the chromosomal abnormalities; (b)
XX CC subjecting the sample to a multiplex molecular amplification (MMA)
XX CC procedure, where a number of the characteristic sequences, if present in
XX CC a sufficient amount, will be amplified; (c) retrieving the product(s)
XX CC from step (b), and detecting the presence and/or absence of an amplicon
XX CC characteristic of the abnormal sequences to detect the presence or
XX CC absence of corresponding chromosomal abnormalities; where the MMA
XX CC procedure comprises the use of at least 7 mutually distinct primers (MDP)
XX CC in one single reaction mixture, each of the primers defining an end of at
XX CC least one characteristic nucleic acid sequence, and where at least one of
XX CC the primers defines the first end of at least two characteristic nucleic
XX CC acid sequences, the characteristic nucleic acid sequences each being
XX CC determined in their opposite ends by MDP selected from the remainder of
XX CC the MDP. The methods can be used for detecting chromosomal abnormalities
XX CC associated with diseases including numerous leukaemia's, lymphoma's,
XX CC carcinoma's, adenocarcinoma's, sarcoma's, glioma's, neuroblastoma's,
XX CC medullablastoma, malignant melanoma, and malignant neoplastic conditions
XX SQ Sequence 19 BP; 4 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 716 TGAACATGAAGAGGGGC 734
DB 19 TGAACATGAAGTGGGTC 1

RESULT 864
AAV26433
ID AAV26433 standard; DNA; 19 BP.
XX AC AAV26433;
XX AC AAV26433;
DT 30-JUL-1998 (first entry)
XX DE lacZ-specific primer 1.

XX lacZ; adeno-associated virus vector; therapeutic; liver; hepatic disease;
XX ss; PCR; primer; amplification.
XX OS Synthetic.
XX PN WO9809524-A1.
XX PD 12-MAR-1998.
XX PF 02-SEP-1997; 97WO-US015453.
XX PX 06-SEP-1996; 96US-0025616P.
XX PX 11-SEP-1996; 96US-0025649P.
XX PA (CHIR ) CHIRON CORP.
XX PA (INDV ) UNIV INDIANA.
XX PX Srivastava A, Ponnazhagan S, Chloemer RH, Wang X, Yoder MC;
XX PI Zhou S, Escobedo J, Dwarki V;
XX PX WPI; 1998-193255/17.
XX CC Novel adeno-associated viral vectors - for liver specific delivery of
XX PT therapeutic molecule.
XX PS Example 1; Page 19; 32pp; English.
XX CC The lacZ-specific primers (AAV26433 and 26434) were used to amplify and
XX CC detect the lacZ gene which had been injected into C57Bl/6 mice using a
XX CC recombinant adeno-associated virus (AAV) vector. This confirmed the adeno
XX CC -associated virus vector can be used to deliver a therapeutic molecule to
XX CC the liver of a mammal. This can be used for the expression of therapeutic
XX CC molecules such as secretory proteins, antisense molecules or ribozymes,
XX CC in the liver, especially to treat hepatic diseases
XX SQ Sequence 19 BP; 3 A; 1 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 223 GATGAGAGTGGTGGTGGT 241
DB 1 GATGAGCGTGGTGGTTATG 19

RESULT 865
AAV17888/c
ID AAV17888 standard; DNA; 19 BP.
XX AC AAV17888;
XX DD 11-MAY-1999 (first entry)
XX DE Anti-CMV oligonucleotide #4376.
XX KW Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
XX KW cytomegalovirus; inhibition; replication; sugar modification;
XX KW phosphorothioate; infection; retinitis; ss.
XX OS Synthetic.
XX OS Human herpesvirus 5.
XX PN WO9845314-A1.
XX PD 15-OCT-1998.
XX PX 07-APR-1998; 98WO-US006895.
XX PX 09-APR-1997; 97US-00838715.
XX PA (ISIS-) ISIS PHARM INC.

```


DR WPI; 2000-412314/35.
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX Disclosure; Page 49; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 976 CGAGACCTCAAGCCCGAGA 994
DB 1 CGAGACCTTAACCTCAGA 19
RESULT 874
AAA82662
ID AAA82662 standard; DNA; 19 BP.
XX
XX AAA82662;
XX
XX 04-DEC-2000 (first entry)
DT
XX cdk2 ribozyme binding site #99.
DE
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
OS
XX WO200032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
PI
XX WPI; 2000-412314/35.
DR
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX Disclosure; Page 49; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1167 GGGCTGCATCTTCTATGAG 1185
DB 1 GGGCTGCATCTTGTCTGAG 19
RESULT 875
AAA82664
ID AAA82664 standard; DNA; 19 BP.
XX
XX AAA82664;
XX
XX 04-DEC-2000 (first entry)
DT
XX cdk2 ribozyme binding site #101.
DE
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
OS
XX WO200032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
PI
XX WPI; 2000-412314/35.
DR
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX Disclosure; Page 49; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1170 CTGCATCTTCTATGAGATG 1188
DB 1 CTGCATCTTGTCTGAGATG 19
RESULT 876
AAA83089
ID AAA83089 standard; DNA; 19 BP.
XX
XX AAA83089;
XX
XX 04-DEC-2000 (first entry)
DT
XX cdk7 ribozyme binding site #10.
DE
XX

KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
 XX Mammalia.
 OS WO200032765-A2.
 XX FN 08-JUN-2000.
 XX PD 06-DEC-1999; 99WO-US028772.
 PF XX 04-DEC-1998; 98US-0110954P.
 XX PR (IMMU-) IMMUSOL INC.
 XX PA Tritz R, Welch PJ, Barber JR, Robbins JM;
 PI WPI; 2000-412314/35.
 XX DR New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
 PT PCNA and Cyclin B1.
 XX PS Disclosure; Page 56; 109pp; English.
 XX CC The present invention relates to a hairpin or hammerhead ribozyme,
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AA82415 to AAA86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in
 CC restenosis treatment
 XX SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 8.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 651 TGCCACCGTCTACAAAGGC 669
 DB 1 TGCCACCGTTTACAAAGGC 19
 RESULT 877
 AAZ40735/c
 ID AAZ40735 standard; DNA; 19 BP.
 XX AC AAZ40735;
 XX DT 21-FEB-2000 (first entry)
 XX DE Primer 1 used in the sequencing of VhalphatAG.
 XX KW VhalphatAG; anti-tumour associated stablylated glycoprotein antigen;
 KW TAG-72; variable region; heavy chain; carcinoma; detect; tumour; ss;
 KW mouse-human chimeric antibody; therapeutic agent; intraoperative therapy;
 KW primer.
 XX OS Synthetic.
 OS Mus sp.
 XX FN US5993813-A.
 XX PD 30-NOV-1999.
 XX PF 24-MAR-1997; 97US-00822028.
 XX PR 19-OCT-1988; 88US-00259943.
 PR 24-OCT-1988; 88US-00261942.
 PR 19-OCT-1989; 89US-00424362.
 PR 31-MAR-1993; 93US-00040687.

PA (DOWC) DOW CHEM CO.
 XX Mezes PS, Gourlie BB, Schlom J, Kaplan DA, Anderson WHK;
 PI Rixon MW;
 XX WPI; 2000-038240/03.
 XX DR New mouse-human chimeric antibody, useful for in vivo diagnosis of
 XX cancer.
 XX PT Example; Col 37; 120pp; English.
 XX PS Primers AAZ40735-Z40740 are used to sequence the VhalphatAG germline
 CC gene, used in the invention. The invention relates to a new anti-tumour
 CC associated stablylated glycoprotein antigen (TAG)-72 mouse-human chimeric
 CC antibody. The variable region has a heavy chain (VH) where VH is encoded
 CC by a DNA sequence homologous to the VhalphatAG germline gene (AAZ40701).
 CC The invention includes a method for in vivo carcinoma targeting through
 CC the administration to an animal of an anti-TAG-72 mouse-human chimeric
 CC antibody produced by specific cell lines. The antibody or a fragment are
 CC conjugated to an imaging marker or therapeutic agent, in a
 CC pharmaceutically acceptable, nontoxic, sterile carrier. The chimeric
 CC antibody binds to TAG-72 which is found on certain human tumour cells.
 CC The tissue regions containing the tumours can be detected via the markers
 CC and/or can be treated via the therapeutic agents. The method is useful
 CC for in vivo diagnosis and treatment of cancer by administering to an
 CC animal an effective amount of a composition for the in situ detection of
 CC carcinoma lesions. The method is useful for intraoperative therapy,
 CC consisting of locating the position of a tumour through the
 CC administration of the antibody, followed by excising the tumour
 XX SQ Sequence 19 BP; 4 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 8.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1293 GTCCACCGAGGAGTTCAAG 1311
 DB 19 GTACANTGAGAGTTCAAG 1
 RESULT 878
 AAF72367/c
 ID AAF72367 standard; DNA; 19 BP.
 XX AC AAF72367;
 XX DT 23-APR-2001 (first entry)
 XX DE PCR primer specific for IFNa2 gene SEQ ID 51.
 XX KW Human; keratinocyte derived interferon; KDI; viral infection; lymphoma;
 KW immune system related disorder; cancer; multiple sclerosis; AIDS;
 KW hepatitis; Cryptosporidium parvum infection; leukaemia; arthritis;
 KW diabetes; allergy; chronic myelogenous leukaemia; PCR primer; ss.
 XX OS Synthetic.
 XX WO200107608-A1.
 XX FN 01-FEB-2001.
 XX PD 20-JAN-2000; 2000WO-US001239.
 XX PF 21-JUL-1999; 99US-00358587.
 XX PR 21-JUL-1999; 99WO-US016424.
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA Ruben SM, Moore PA, Lafleur DW;
 PI WPI; 2001-138557/14.
 XX DR

XX Isolated keratinocyte derived interferon protein and polynucleotide used
 PT to prevent, treat or ameliorate an immune system-related disorder, viral
 PT infection, viral exposure and cancer.

XX Example 5; Page 187; 303pp; English.

XX This invention relates to human polynucleotide sequence AAF72333 which
 CC encodes keratinocyte derived interferon (KDI) protein AAB49774, which is
 CC a member of the interferon family. AAF72338 represents the codon
 CC optimised sequence of KDI. The human KDI gene is located on chromosome 9.
 CC The specification includes KDI related protein sequences AAB49775 -
 CC AAB49789. Also given in the specification are primer, probe and
 CC polynucleotide sequences represented by AAF72334-AAF72370 (excluding
 CC AAF72338) which are used in the isolation and characterisation of the KDI
 CC sequence of the invention. The KDI polypeptide is used to treat viral
 CC infections and the protein and polynucleotide may be used to prevent,
 CC treat or ameliorate a medical condition such as immune system-related
 CC disorder, viral infection, viral exposure and cancer in a mammal.
 CC Specific disorders which can be treated by KDI include multiple
 CC sclerosis, lymphoma, acquired immune deficiency syndrome, viral
 CC hepatitis, Cryptosporidium parvum infection, chronic myelogenous
 CC leukaemia, arthritis, diabetes and allergies

XX Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 8.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 926 TCCAGCTGCTCCGTGGCCT 944

DB 19 TCAAGCTGCTCTGGGCT 1

RESULT 879

AAAF91206/C

ID AAF91206 standard; DNA; 19 BP.

AC AAF91206;

XX 04-MAY-2001 (first entry)

XX Human multi drug resistance-1 gene related sequence SEQ ID NO: 293.

XX Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
 KW inflammatory disease; neuronal disease; CNS disease;
 KW cardiovascular disease; PCR primer; ss.

XX Homo sapiens.

XX WO200109183-A2.

XX 08-FEB-2001.

XX 28-JUL-2000; 2000WO-EP007314.

XX 30-JUL-1999; 99EP-00114938.

XX 22-FEB-2000; 2000EP-00103361.

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;

XX WPI; 2001-159855/16.

XX New polynucleotide encoding a molecular variant Multi Drug Resistance
 PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases
 PT associated with abnormal MDR-1 expression or function, e.g. cancer.

XX Claim 1; Page 137; 154pp; English.

XX The present invention provides nucleotides encoding molecular variants of

CC the human multi drug resistance-1 (MDR-1) protein. These can be used to
 CC identify compounds capable of treating multidrug resistance and
 CC sensitivity interfering resulting from polymorphisms in MDR-1, which can
 CC lead to difficulties in treating cancer, cardiovascular, neuronal,
 CC inflammatory and CNS diseases

XX Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 8.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCAGT 406

DB 19 TCCTCTGAGGATGTCAGT 1

RESULT 880

AAAF91205

ID AAF91205 standard; DNA; 19 BP.

XX AAF91205;

XX 04-MAY-2001 (first entry)

XX Human multi drug resistance-1 gene related sequence SEQ ID NO: 292.

XX Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
 KW inflammatory disease; neuronal disease; CNS disease;
 KW cardiovascular disease; PCR primer; ss.

XX Homo sapiens.

XX WO200109183-A2.

XX 08-FEB-2001.

XX 28-JUL-2000; 2000WO-EP007314.

XX 30-JUL-1999; 99EP-00114938.

XX 22-FEB-2000; 2000EP-00103361.

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;

XX WPI; 2001-159855/16.

XX New polynucleotide encoding a molecular variant Multi Drug Resistance
 PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases
 PT associated with abnormal MDR-1 expression or function, e.g. cancer.

XX Claim 1; Page 137; 154pp; English.

XX The present invention provides nucleotides encoding molecular variants of
 CC the human multi drug resistance-1 (MDR-1) protein. These can be used to
 CC identify compounds capable of treating multidrug resistance and
 CC sensitivity interfering resulting from polymorphisms in MDR-1, which can
 CC lead to difficulties in treating cancer, cardiovascular, neuronal,
 CC inflammatory and CNS diseases

XX Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 8.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCAGT 406

DB 1 TCCTCTGAGGATGTCAGT 19

RESULT 881

AAH57928
ID AAH57928 standard; DNA; 19 BP.
XX
AC AAH57928;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:352.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiporiatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 97; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiporiatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnery, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 2 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1094 CACTGTGGTACCGGCCCC 1112
DB 1 CACTGTGGTATCGGCCCC 19

RESULT 882
AAH58160
ID AAH58160 standard; DNA; 19 BP.
XX
AC AAH58160;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk6 ribozyme binding site SEQ ID NO:584.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiporiatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 114; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiporiatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnery, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 1 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1028 TGGCTGACTTTGGCCTGGC 1046
DB 1 TGGCTGACTTTGGCCTGGC 1046

Db 1 TCGCTGACTGCGCCTTGC 19

RESULT 883
AAH58252
ID AAH58252 standard; DNA; 19 BP.
AC AAH58252;
DT 10-SEP-2001 (first entry)
XX Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:676.
DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulneryary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX Homo sapiens.
OS Synthetic.
XX WO200130362-A2.
XX 03-MAY-2001.
XX 26-OCT-2000; 2000WO-US029500.
XX 26-OCT-1999; 99US-0161532P.
XX (IMMU-) IMMUSOL INC.
XX Robbins JM, Tritz R;
PI WPI; 2001-300427/31.
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX Example 1; Page 121; 408pp; English.
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, vulneryary, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, cytostatic, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 652 GCCACCGTCTACAAAGGCA 670
||||| ||||| ||||| ||||| |||||
Db 1 GCCACCGTCTACAAAGGCA 19

RESULT 884
AAH58251
ID AAH58251 standard; DNA; 19 BP.
AC AAH58251;
DT 10-SEP-2001 (first entry)
XX Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:675.
DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulneryary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX Homo sapiens.
OS Synthetic.
XX WO200130362-A2.
XX 03-MAY-2001.
XX 26-OCT-2000; 2000WO-US029500.
XX 26-OCT-1999; 99US-0161532P.
XX (IMMU-) IMMUSOL INC.
XX Robbins JM, Tritz R;
PI WPI; 2001-300427/31.
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX Example 1; Page 121; 408pp; English.
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, vulneryary, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, cytostatic, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 651 TGCCACCGTCTACAAAGCC 669
||||||| ||||| |
Db 1 TGCCACCGTTTACAAAGCC 19

RESULT 885
AAH58057
ID AAH58057 standard; DNA; 19 BP.
XX AC AAH58057;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:481.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antiscikling; ophthalmological; keratolytic; gene therapy; viral wart;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 107; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiscikling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
SQ Sequence 19 BP; 2 A; 2 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1158 GTGGGGTGTGGGCTGCATC 1176
||||| ||||| ||||| |||||
Db 1 GTGGAGTGTGGCTGTATC 19

RESULT 886
AAH57792
ID AAH57792 standard; DNA; 19 BP.
XX AC AAH57792;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:216.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antiscikling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 87; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiscikling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX

CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1169 GCTGCATCTTCTATGAGAT 1187
|||||||
Db 1 GCTGCATCTTCTGCTGAGAT 19
RESULT 889
AAH57824
ID AAH57824 standard; DNA; 19 BP.
XX
AC AAH57824;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:248.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulneryary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiposoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
PN WO200130362-A2.
XX
XX 03-MAY-2001.
PD
PF 26-OCT-2000; 2000WO-US029500.
PP
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 90; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiposoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulneryary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic

CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1167 GGGCTGCATCTTCTATGAG 1185
|||||||
Db 1 GGGCTGCATCTTGTCTGAG 19
RESULT 890
AAH57826
ID AAH57826 standard; DNA; 19 BP.
XX
AC AAH57826;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:250.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulneryary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiposoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
PN WO200130362-A2.
XX
XX 03-MAY-2001.
PD
PF 26-OCT-2000; 2000WO-US029500.
PP
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 90; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antiposoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis,

CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention

SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1170 CTGCATCTTCTATGAGATG 1188

Db 1 CTGCATCTTCTGAGATG 19

RESULT 891

ABL88859

ID ABL88859 standard; DNA; 19 BP.

XX ABL88859;

AC ABL88859;

DT 22-MAY-2002 (first entry)

XX 22-MAY-2002 (first entry)

DE HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:81.

XX Binding molecule; HIV-1; human immunodeficiency virus type 1;

KW reverse transcriptase; binding group; ss.

XX Human immunodeficiency virus 1.

OS Synthetic.

XX EP1174518-A1.

PN 23-JAN-2002.

XX 20-JUL-2000; 2000EP-00202611.

XX 20-JUL-2000; 2000EP-00202611.

PR (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.

XX Loukachov VV, Van Gemen B, Goudsmit J;

XX WPI; 2002-156696/21.

DR Collection of binding groups for determining or typing samples,

XX especially clinical samples, has groups capable to identify essentially

PT all members of the family of nucleic acids of relatively high

XX significance.

XX Disclosure; Page 26; 166pp; English.

XX The present invention describes a collection of binding groups for a

CC family of nucleic acids comprising members of relative high and relative

CC low significance, where the binding groups are selected to be capable to

CC identify, alone or in combination, essentially all members of the family

CC of nucleic acids of relatively high significance. The collection of

CC binding groups is useful for typing of nucleic acid in a clinical sample,

CC by contacting the nucleic acid with the collection and determining

CC whether one or more binding groups bound to the nucleic acid of the

CC sample. This method is useful for determining whether the sample

CC comprises at least a part of a member of relatively high significance

CC of a family of nucleic acids. The collection of binding groups is useful for

CC diagnosing the severity of a disease caused by a pathogen containing a

CC member of a family of nucleic acids. ABL88779 to ABL89321 represent

CC oligonucleotide sequences used in the exemplification of the present

CC invention

XX Sequence 19 BP; 8 A; 4 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1505 CCATATTTCACATAAGGA 1523

Db 1 CCATATTTCACATAAGGA 19

RESULT 892

ABL88857

ID ABL88857 standard; DNA; 19 BP.

XX ABL88857;

AC ABL88857;

XX 22-MAY-2002 (first entry)

XX 22-MAY-2002 (first entry)

DE HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:79.

XX Binding molecule; HIV-1; human immunodeficiency virus type 1;

KW reverse transcriptase; binding group; ss.

XX Human immunodeficiency virus 1.

OS Synthetic.

XX EP1174518-A1.

PN 23-JAN-2002.

XX 20-JUL-2000; 2000EP-00202611.

XX 20-JUL-2000; 2000EP-00202611.

PR (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.

XX Loukachov VV, Van Gemen B, Goudsmit J;

XX WPI; 2002-156696/21.

DR Collection of binding groups for determining or typing samples,

XX especially clinical samples, has groups capable to identify essentially

PT all members of the family of nucleic acids of relatively high

XX significance.

XX Disclosure; Page 26; 166pp; English.

XX The present invention describes a collection of binding groups for a

CC family of nucleic acids comprising members of relative high and relative

CC low significance, where the binding groups are selected to be capable to

CC identify, alone or in combination, essentially all members of the family

CC of nucleic acids of relatively high significance. The collection of

CC binding groups is useful for typing of nucleic acid in a clinical sample,

CC by contacting the nucleic acid with the collection and determining

CC whether one or more binding groups bound to the nucleic acid of the

CC sample. This method is useful for determining whether the sample

CC comprises at least a part of a member of relatively high significance

CC of a family of nucleic acids. The collection of binding groups is useful for

CC diagnosing the severity of a disease caused by a pathogen containing a

CC member of a family of nucleic acids. ABL88779 to ABL89321 represent

CC oligonucleotide sequences used in the exemplification of the present

CC invention

XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1505 CCATATTTCACATAAGGA 1523

Db 1 CCATATTTCACATAAGGA 19

RESULT 893
ABL88851
ID ABL88851 standard; DNA; 19 BP.
XX
AC ABL88851;
XX
DT 22-MAY-2002 (first entry)
XX
DE HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:73.
XX
KW Binding molecule; HIV-1; human immunodeficiency virus type 1;
KW reverse transcriptase; binding group; ss.
XX
OS Human immunodeficiency virus 1.
OS Synthetic.
PN EP1174518-A1.
XX
XX 23-JAN-2002.
XX
PF 20-JUL-2000; 2000EP-00202611.
XX
PR 20-JUL-2000; 2000EP-00202611.
XX
PA (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
XX
PI Loukachov VV, Van Gemen B, Goudsemit J;
XX
DR WPI; 2002-156696/21.
XX
PT Collection of binding groups for determining or typing samples,
PT especially clinical samples, has groups capable to identify essentially
PT all members of the family of nucleic acids of relatively high
PT significance.
PS Disclosure; Page 24; 166pp; English.
XX
CC The present invention describes a collection of binding groups for a
CC family of nucleic acids comprising members of relative high and relative
CC low significance, where the binding groups are selected to be capable to
CC identify, alone or in combination, essentially all members of the family
CC of nucleic acids of relatively high significance. The collection of
CC binding groups is useful for typing of nucleic acid in a clinical sample,
CC by contacting the nucleic acid with the collection and determining
CC whether one or more binding groups bound to the nucleic acid of the
CC sample. This method is useful for determining whether the sample
CC comprises at least a part of a member of relatively high significance of
CC a family of nucleic acids. The collection of binding groups is useful for
CC diagnosing the severity of a disease caused by a pathogen containing a
CC member of a family of nucleic acids. ABL88779 to ABL89321 represent
CC oligonucleotide sequences used in the exemplification of the present
CC invention
XX
SQ Sequence 19 BP; 10 A; 2 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1505 CCATATTTGCACTAAAGGA 1523
DB 1 CAATATTTGCATTAAGAA 19
RESULT 894
AAD36056/c
ID AAD36056 standard; DNA; 19 BP.
XX
AC AAD36056;
XX
DT 09-AUG-2002 (first entry)
XX

DE Rabbit skeletal muscle MLCK DNA amplifying downstream primer.
XX
KW Rabbit; cardiac myosin light chain kinase; cMLCK; tricuspid valve;
KW cardiac dysfunction; systolic dysfunction; mitral valve prolapse;
KW diastolic dysfunction; cardiac hypertrophy; tricuspid insufficiency;
KW coronary heart disease; myocardial infarction; mitral insufficiency;
KW valvular heart disease; congestive heart failure; mitral valve;
KW cardiomyopathy; cardiac; PCR; primer; ss.
XX
OS Oryctolagus cuniculus.
XX
PN WO200224889-A2.
XX
PD 28-MAR-2002.
XX
PF 12-SEP-2001; 2001WO-US028639.
XX
PR 12-SEP-2000; 2000US-0232246P.
PR 13-SEP-2000; 2000US-0232456P.
XX
PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Epstein ND, Hassanzadeh S, Winitzky S, Davis JS;
XX
DR WPI; 2002-394135/42.
XX
PT New isolated cardiac myosin light chain kinase (cMLCK) protein, useful
PT for identifying cMLCK modulators that are used for treating cardiac
PT dysfunction e.g. systolic or diastolic dysfunction, myocardial
PT infarction.
XX
PS Disclosure; Page 28; 105pp; English.
XX
CC The invention relates to cDNA, protein sequence and genomic structure of
CC the human cardiac isoform of myosin light chain kinase (cMLCK) and
CC mutations in cMLCK gene that are associated with cardiac dysfunction. The
CC invention also relates to methods for identifying agents that modulate
CC cMLCK activity. cMLCK is useful for detecting enhanced susceptibility of
CC a subject to cardiac dysfunction. cMLCK is useful for screening for an
CC agent that modulates its biological activity. The method is useful for
CC enhancing or preserving cardiac function in a subject having cardiac
CC dysfunction, and harbouring a mutation in cMLCK allele. The method is
CC useful for enhancing or preserving cardiac function in a subject having
CC cardiac dysfunction such as systolic dysfunction, diastolic dysfunction,
CC cardiac hypertrophy, cardiomyopathy, coronary heart disease, myocardial
CC infarction, or congestive heart failure, or for preserving cardiac
CC function, or cardiac dysfunction which comprises valvular heart disease
CC such as mitral valve disease, tricuspid valve disease, mitral
CC insufficiency, tricuspid insufficiency, or mitral valve prolapse. The
CC method is useful for treating cardiac dysfunction, e.g., systolic or
CC diastolic dysfunction, coronary heart disease, cardiac hypertrophy,
CC cardiomyopathy, myocardial infarction, or congestive heart failure. The
CC present sequence is a PCR primer used to amplify rabbit skeletal muscle
CC MLCK DNA
XX
SQ Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 969 GCTACACCGAGACCTCAAG 987
DB 19 GCTGCACCTGGACCTCAAG 1
RESULT 895
ACC47620
ID ACC47620 standard; DNA; 19 BP.
XX
AC ACC47620;
XX
DT 11-SEP-2003 (first entry)
XX

XX	Mucor circinelloides carRP PCR primer #62, SEQ ID NO:6.
DE	
XX	Beta-carotene; biosynthesis; biosynthetic pathway; carotenoid;
KW	Blakeslea trispora; carRP; bifunctional enzyme; lycopene cyclase;
KW	phytoene synthase; carb; phytoene dehydrogenase; PCR; primer; ss.
XX	
OS	Mucor circinelloides.
XX	
PN	WO2003027293-A1.
PD	03-APR-2003.
XX	
PP	26-SEP-2002; 2002WO-ES000452.
XX	
PR	26-SEP-2001; 2001ES-00002161.
XX	(ANTI) ANTIBIOTICOS SAU.
PA	Rodriguez Saiz M, Marcos Rodriguez AT, Diez Garcia B;
PI	De La Fuente Moreno JL, Barrado Fuente JL;
PL	
PT	WI; 2003-313642/30.
DR	
XX	New carRP and carb genes from Blakeslea trispora, useful for increasing
PT	production of beta-carotene or other carotenoids, also related vectors
PT	and polypeptides.
XX	
PS	Example 2; Page 41; 50pp; Spanish.
XX	
CC	The invention relates to beta-carotene biosynthetic genes from the fungus
CC	Blakeslea trispora. The carP gene (ACC47617) encodes a bifunctional
CC	enzyme, lycopene cyclase/phytoene synthase (ABP97464), and the carb gene
CC	(ACC47618) encodes phytoene dehydrogenase (ABP97465). The invention also
CC	encompasses plasmids for the expression of additional copies of these genes,
CC	and plasmids for the expression of heterologous genes under the control
CC	of the carP or the carb promoter. The carP and carb genes can be
CC	overexpressed to increase production of beta-carotene in B. trispora, or
CC	to modify the beta-carotene biosynthetic pathway to create B. trispora
CC	strains able to produce other carotenoids such as lycopene. The promoters
CC	of these genes may also be used to control expression of heterologous
CC	genes such as the Streptococcus hindustanus bleomycin resistance
CC	gene (bler) in B. trispora. Sequences ACC47619-ACC47620 represent Mucor
CC	circinelloides carRP PCR primers used to generate a probe used in the
CC	isolation of Blakeslea trispora DNA fragments containing both the carRP
CC	and carb genes in an example from the invention
XX	
SQ	Sequence 19 BP; 4 A; 9 C; 4 G; 2 T; 0 U; 0 Other;
	Query Match 0.8%; Score 14.2; DB 1; Length 19;
	Best Local Similarity 84.2%; Pred. No. 8.4e+02;
	Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY	1354 CACGACCGCCGACTTGATA 1372
DB	1 CAGCAGCGCCGCTTGACA 19
RESULT 896	
AAL53983	
ID	AAL53983 standard; DNA; 19 BP.
XX	
AC	AAL53983;
XX	
DT	18-FEB-2003 (first entry)
XX	
DE	Human serotonin 1B receptor gene PCR primer, SEQ ID No 7.
XX	
XW	Single nucleotide polymorphism; analgesic; variant allele; A-161T;
KW	human serotonin 1B receptor gene; additive disease; neurologic;
KW	psychiatric condition; pain reliever; analgesia; PCR; primer; ss.
XX	
OS	Homo sapiens.

XX Disclosure; Page 44; 86pp; English.

PS The present invention describes the use of irinotecan (I) or its

XX derivative for the preparation of a pharmaceutical composition for

CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic

CC cancer, or malignant glioma in a subject having a genome with a variant

CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine

CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have

CC cytostatic activity. The therapeutic applications of (I) is improved,

CC since it is possible to individually treat a subject with an appropriate

CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,

CC harmful or toxic effects are efficiently avoided. Unnecessary and

CC potentially harmful treatment of those subjects who do not respond to the

CC treatment with substances (nonresponders), as well as the development of

CC drug resistances due to suboptimal drug dosing can be avoided. ACP62200

CC to ACP62751 and ABM34912 to ABM35013 represent sequences used in the

CC exemplification of the present invention

XX

SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 8.4e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCGAGT 406

DB 1 TCCTCTGAGGATGCGAGT 19

RESULT 900

ACF62641/c

ID ACF62641 standard; DNA; 19 BP.

XX ACF62641;

XX

DT 08-OCT-2003 (first entry)

XX

DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:470.

XX

XX Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;

KW cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;

KW cytostatic; PCR primer; ss.

XX

OS Synthetic.

XX

PN WC2003013534-A2.

XX

PD 20-FEB-2003.

XX

PF 23-JUL-2002; 2002WO-EP008219.

XX

PR 23-JUL-2001; 2001EP-00117608.

PR 24-MAY-2002; 2002EP-00011710.

XX

PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX

PI Heinrich G, Kerb R;

XX

DR WPI; 2003-268144/26.

XX

PT New use of irinotecan for preparation of compositions for treating cancer

PT in subject having genome with variant allele comprising cytochrome p450,

PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.

XX

PS Disclosure; Page 44; 86pp; English.

XX

CC The present invention describes the use of irinotecan (I) or its

CC derivative for the preparation of a pharmaceutical composition for

CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic

CC cancer, or malignant glioma in a subject having a genome with a variant

CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine

CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have

XX

SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 8.4e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCGAGT 406

DB 1 TCCTCTGAGGATGCGAGT 19

RESULT 901

ADB21311

ID ADB21311 standard; DNA; 19 BP.

XX

AC ADB21311;

XX

DT 20-NOV-2003 (first entry)

XX

DE MRP1 based cancer related nucleic acid SEQ ID NO:469.

XX

XX irinotecan; colorectal cancer; cervical cancer; gastric cancer;

KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;

KW variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;

KW ds.

XX

OS Unidentified.

XX

PN WC2003013533-A2.

XX

PD 20-FEB-2003.

XX

PF 23-JUL-2002; 2002WO-EP008200.

XX

PR 23-JUL-2001; 2001EP-00117608.

PR 24-MAY-2002; 2002EP-00011710.

XX

PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX

PI Heinrich G, Kerb R;

XX

DR WPI; 2003-354397/33.

XX

PT Use of irinotecan or its derivative for preparation of a pharmaceutical

PT composition for treating cancer in a subject having a genome with a

PT variant allele comprising a multidrug resistance protein 1

PT polynucleotide.

XX

PS Disclosure; Page 54; 100pp; English.

XX

CC The present invention describes a method for the use of irinotecan (I) or

CC its derivative for the preparation of a pharmaceutical composition for

CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic

CC cancer, or malignant glioma in a subject having a genome with a variant

CC allele which comprises a multidrug resistance protein 1 (MRP1)

CC polynucleotide (II). (I) has cytostatic activity. (I) or its derivative

CC can be used for the preparation of a pharmaceutical composition for

CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic

CC cancer, or malignant glioma in a subject, where the subject is a human

CC (preferably African or Asian) or a mouse. The present sequence represents

CC a sequence which is used in the exemplification of the present invention.

XX

SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

CC cytostatic activity. The therapeutic applications of (I) is improved,

CC since it is possible to individually treat a subject with an appropriate

CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,

CC harmful or toxic effects are efficiently avoided. Unnecessary and

CC potentially harmful treatment of those subjects who do not respond to the

CC treatment with substances (nonresponders), as well as the development of

CC drug resistances due to suboptimal drug dosing can be avoided. ACP62200

CC to ACP62751 and ABM34912 to ABM35013 represent sequences used in the

CC exemplification of the present invention

XX

SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 8.4e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCGAGT 406

DB 19 TCCTCTGAGGATGCGAGT 1

RESULT 901

ADB21311

ID ADB21311 standard; DNA; 19 BP.

XX

AC ADB21311;

XX

DT 20-NOV-2003 (first entry)

XX

DE MRP1 based cancer related nucleic acid SEQ ID NO:469.

XX

XX irinotecan; colorectal cancer; cervical cancer; gastric cancer;

KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;

KW variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;

KW ds.

XX

OS Unidentified.

XX

PN WC2003013533-A2.

XX

PD 20-FEB-2003.

XX

PF 23-JUL-2002; 2002WO-EP008200.

XX

PR 23-JUL-2001; 2001EP-00117608.

PR 24-MAY-2002; 2002EP-00011710.

XX

PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX

PI Heinrich G, Kerb R;

XX

DR WPI; 2003-354397/33.

XX

PT Use of irinotecan or its derivative for preparation of a pharmaceutical

PT composition for treating cancer in a subject having a genome with a

PT variant allele comprising a multidrug resistance protein 1

PT polynucleotide.

XX

PS Disclosure; Page 54; 100pp; English.

XX

CC The present invention describes a method for the use of irinotecan (I) or

CC its derivative for the preparation of a pharmaceutical composition for

CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic

CC cancer, or malignant glioma in a subject having a genome with a variant

CC allele which comprises a multidrug resistance protein 1 (MRP1)

CC polynucleotide (II). (I) has cytostatic activity. (I) or its derivative

CC can be used for the preparation of a pharmaceutical composition for

CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic

CC cancer, or malignant glioma in a subject, where the subject is a human

CC (preferably African or Asian) or a mouse. The present sequence represents

CC a sequence which is used in the exemplification of the present invention.

XX

SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

```
Query Match          0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCACT 406
    ||||| ||| ||| |||||
Db 1 TCCTCTGAGGATGTGCAGT 19

RESULT 902
ADB21312/c
ID ADB21312 standard; DNA; 19 BP.
XX
AC ADB21312;
XX
DT 20-NOV-2003 (first entry)
XX
DE MRP1 based cancer related nucleic acid SEQ ID NO:470.
XX
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
KW ds.
XX
OS Unidentified.
XX
PN WO2003013533-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008200.
XX
XX 23-JUL-2001; 2001EP-00117608.
PR
PR 24-MAY-2002; 2002EP-00011710.
XX
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
PA
XX Heinrich G, Kerb R;
PI
XX WPI; 2003-354397/33.
DR
XX Use of irinotecan or its derivative for preparation of a pharmaceutical
PT composition for treating cancer in a subject having a genome with a
PT variant allele comprising a multidrug resistance protein 1
PT polynucleotide.
XX
PS Disclosure; Page 54; 100pp; English.
XX
CC The present invention describes a method for the use of irinotecan (I) or
CC its derivative for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject having a genome with a variant
CC allele which comprises a multidrug resistance protein 1 (MRP1)
CC polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
CC can be used for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject, where the subject is a human
CC (preferably African or Asian) or a mouse. The present sequence represents
CC a sequence which is used in the exemplification of the present invention.
XX
SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match          0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCACT 406
    ||||| ||| ||| |||||
Db 19 TCCTCTGAGGATGTGCAGT 1

RESULT 903
```

```
ACF39450/c
ID ACF39450 standard; DNA; 19 BP.
XX
AC ACF39450;
XX
DT 26-SEP-2003 (first entry)
XX
DE Acute lymphoblastic leukaemia assay related primer #12.
XX
KW Simultaneous detection; multiple target nucleic acid molecule;
KW biological sample; Exonuclease I; PCR; human papillomavirus; HPV;
KW BARCODE-MT; acute lymphoblastic leukaemia; cancer; assay;
KW bead array coded detection of multiple target; microarray;
KW targeted genetic risk-stratification; primer; probe; ss.
XX
OS Synthetic.
XX
PN WO2003054149-A2.
XX
PD 03-JUL-2003.
XX
PF 06-DEC-2002; 2002WO-US039223.
XX
XX 07-DEC-2001; 2001US-0338442P.
PR
PR 05-NOV-2002; 2002US-0423793P.
XX
XX (UYMA-) UNIV MASSACHUSETTS.
PA
XX Pihan G;
PI
XX WPI; 2003-559133/52.
DR
XX Simultaneously detecting the presence of multiple target nucleic acid
PT molecules in a biological sample for optimising risk-adapted therapy for
PT a disorder by treating the enriched target nucleic acid molecules with
PT Exonuclease I.
XX
XX Example 1; Fig 6; 41pp; English.
PS
CC The present invention describes a method for simultaneously detecting the
CC presence of multiple target nucleic acid molecules in a biological sample
CC comprising: (a) isolating and enriching target nucleic acid molecules
CC from the biological sample; (b) treating the enriched target nucleic acid
CC molecules with Exonuclease I; (c) performing linear PCR on the
CC Exonuclease I treated enriched target nucleic acid molecule to produce
CC linear PCR product where only a single primer is used; (d) obtaining
CC beads coupled to an oligonucleotide molecule complementary to the
CC amplified target nucleic acid molecules; (e) forming a mixture by mixing
CC the beads and the enriched linear PCR product nucleic acid; (f) forming a
CC reacted sample by incubating the mixture under conditions where if the
CC enriched linear PCR product includes the target nucleic acid molecule,
CC the enriched linear PCR product will hybridise to the oligonucleotide
CC molecule; (g) analysing the reacted sample by determining the
CC fluorescence of each bead analysed; and (h) detecting a level of
CC fluorescence on the beads, where the level of fluorescence corresponds to
CC a level of a target nucleic acid molecule in the biological sample. The
CC method for simultaneously detecting the presence of multiple target
CC nucleic acid molecules in a biological sample or for optimising risk-
CC adapted therapy for a disorder associated with the target nucleic acid.
CC ACF39439 to ACF39597 represent primers and probes used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 4 A; 2 C; 10 G; 3 T; 0 U; 0 Other;

Query Match          0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1674 AGCCCCCAACTACATCTTC 1692
    ||||| ||| ||| |||||
Db 19 AGCCCCCAACTCTCTCTGC 1
```



```

Query Match      0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCGAGT 406
Db 1 TCCTCTGAGGATGTGCAGT 19

RESULT 909
ADB92575/c
ID ADB92575 standard; DNA; 19 BP.
XX AC ADB92575;
XX DT 04-DEC-2003 (first entry)
XX DE Human MDR1 variant allele sequence fragment SEQ ID NO:470.
XX KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
XX lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
XX multidrug resistance 1; MDR1; cytosstatic; ds; human; UGT1A1; MRP1; TOP1.
XX OS Homo sapiens.
XX PN WO2003013535-A2.
XX PD 20-FEB-2003.
XX PF 23-JUL-2002; 2002WO-EP008220.
XX PR 23-JUL-2001; 2001EP-00117608.
XX PR 24-MAY-2002; 2002EP-00011710.
XX PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX PI Heinrich G, Kerb R;
XX DR WPI; 2003-342400/32.
XX PS Claim 8; Page 54; 104pp; English.
XX CC The invention relates to a novel use of irinotecan or its derivative for
CC the preparation of a pharmaceutical composition for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject having a genome with a variant allele which comprises
CC a multidrug resistance 1 (MDR1) polynucleotide. A composition of the
CC invention has cytostatic activity. The present sequence is used in the
CC exemplification of the invention.
XX SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match      0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCGAGT 406
Db 1 TCCTCTGAGGATGTGCAGT 19

RESULT 911
ADB29746
ID ADE29746 standard; RNA; 19 BP.
XX AC ADE29746;
XX DT 29-JAN-2004 (first entry)
XX DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:368.
XX KW short interfering nucleic acid; siNA; downregulation; inhibition;
XX mitogen-activated protein kinase; MAP kinase; RNA interference;
XX cytosstatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
XX immunosuppressive; antibacterial; antirheumatic; antiarthritic;
XX antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
XX inflammatory disease; asthma; septic shock; rheumatoid arthritis;
XX psoriasis; inflammatory bowel disease; drug screening;
XX genetic engineering; pharmacogenomic; gene mapping; ss.
XX OS Synthetic.
XX PN WO2003072590-A1.
XX PR 04-SEP-2003.
XX PD 04-SEP-2003.

```


KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
 KW psoriasis; inflammatory bowel disease; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX Synthetic.
 OS
 PN WO2003072590-A1.
 XX
 PD 04-SEP-2003.
 XX
 PF 28-JAN-2003; 2003WO-US002510.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (SIRN-) SIRNA THERAPEUTICS INC.
 XX
 PI Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
 XX
 DR WPI; 2003-689980/65.
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of mitogen-activated
 PT protein kinase genes.
 XX
 PS Example 3; SEQ ID NO 463; 164pp; English.
 XX
 CC The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of a mitogen-activated protein kinase
 CC (MAPK) genes by RNA interference. Also described: (1) a method for
 CC modulating expression of MAPK genes in cells, tissue explants or
 CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
 CC vectors that express siNA and cells containing these vectors. MAPK siNAs
 CC have cytostatic, anorectic, antidiabetic, antiinflammatory,
 CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
 CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
 CC siNAs can be used to modulate the expression of MAPK genes, in cells,
 CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
 CC and II; a wide range of tumours, and inflammatory diseases (asthma,
 CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
 CC disease). They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents a MAPK siNA which is used
 CC in the exemplification of the present invention.
 XX
 SQ Sequence 19 BP; 3 A; 2 C; 9 G; 0 T; 5 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 8.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 985 AGCCCCCAGACCTGCTCA 1003
 DB 19 AAGCCCTCCAACTGCTCA 1
 RESULT 914
 ADE29736
 ID ADE29736 standard; RNA; 19 BP.
 XX
 AC ADE29736;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:358.
 XX

KW short interfering nucleic acid; siNA; downregulation; inhibition;
 KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
 KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
 KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
 KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
 KW psoriasis; inflammatory bowel disease; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX Synthetic.
 OS
 XX WO2003072590-A1.
 XX
 PD 04-SEP-2003.
 XX
 PF 28-JAN-2003; 2003WO-US002510.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (SIRN-) SIRNA THERAPEUTICS INC.
 XX
 PI Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
 XX
 DR WPI; 2003-689980/65.
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of mitogen-activated
 PT protein kinase genes.
 XX
 PS Example 3; SEQ ID NO 358; 164pp; English.
 XX
 CC The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of a mitogen-activated protein kinase
 CC (MAPK) genes by RNA interference. Also described: (1) a method for
 CC modulating expression of MAPK genes in cells, tissue explants or
 CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
 CC vectors that express siNA and cells containing these vectors. MAPK siNAs
 CC have cytostatic, anorectic, antidiabetic, antiinflammatory,
 CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
 CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
 CC siNAs can be used to modulate the expression of MAPK genes, in cells,
 CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
 CC and II; a wide range of tumours, and inflammatory diseases (asthma,
 CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
 CC disease). They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents a MAPK siNA which is used
 CC in the exemplification of the present invention.
 XX
 SQ Sequence 19 BP; 5 A; 9 C; 2 G; 0 T; 3 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 73.7%; Pred. No. 8.4e+02;
 Matches 14; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
 QY 985 AGCCCCCAGACCTGCTCA 1003
 DB 1 AAGCCCTCCAACTGCTCA 19
 RESULT 915
 ADE29735
 ID ADE29735 standard; RNA; 19 BP.
 XX
 AC ADE29735;
 XX

XX 29-JAN-2004 (first entry)

DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:357.

XX

XX short interfering nucleic acid; siNA; downregulation; inhibition;

KW Mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;

KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;

KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;

KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;

KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;

KW psoriasis; inflammatory bowel disease; drug screening;

KW genetic engineering; pharmacogenomic; gene mapping; ss.

OS Synthetic.

XX

XX WO2003072590-A1.

PN

XX 04-SEP-2003.

PD

XX 28-JAN-2003; 2003WO-US002510.

XX

PF 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX

PA (SIRN-) SIRNA THERAPEUTICS INC.

XX

XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;

PI

XX WPI; 2003-689980/65.

DR

XX

XX New short interfering nucleic acid, useful e.g. for treatment and

PT diagnosis of cancer, downregulates expression of mitogen-activated

PT protein kinase genes.

PT

XX Example 3; SEQ ID NO 357; 164pp; English.

PS

XX The present invention describes a short interfering nucleic acid (siNA)

CC that downregulates expression of a mitogen-activated protein kinase

CC (MAPK) genes by RNA interference. Also described: (1) a method for

CC modulating expression of MAPK genes in cells, tissue explants or

CC organisms by introduction of siNA; (2) kits for in vitro or in vivo

CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)

CC vectors that express siNA and cells containing these vectors. MAPK siNAs

CC have cytostatic, anorectic, antidiabetic, antiinflammatory,

CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,

CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK

CC siNAs can be used to modulate the expression of MAPK genes, in cells,

CC tissue explants or organisms, e.g. for treating obesity; diabetes types I

CC and II; a wide range of tumours, and inflammatory diseases (asthma,

CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel

CC disease). They can also be used for drug screening; diagnosis; target

CC identification and validation; genetic engineering; pharmacogenomics;

CC studying gene function and gene mapping (e.g. of single-nucleotide

CC polymorphisms). The present sequence represents a MAPK siNA which is used

CC in the exemplification of the present invention.

XX

XX Sequence 19 BP; 5 A; 6 C; 4 G; 0 T; 4 U; 0 Other;

SQ

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 68.4%; Pred. No. 8.4e+02;

Matches 13; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

967 GTGCTACACCGAGCTCA 985

1 GUGCUCACCGAGUCAA 19

RESULT 916

DE29840/c

XX ADE29840 standard; RNA; 19 BP.

XX

AC ADE29840;

XX

XX 29-JAN-2004 (first entry)

DT

XX Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:462.

DE

XX short interfering nucleic acid; siNA; downregulation; inhibition;

KW Mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;

KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;

KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;

KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;

KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;

KW psoriasis; inflammatory bowel disease; drug screening;

KW genetic engineering; pharmacogenomic; gene mapping; ss.

OS Synthetic.

XX

XX WO2003072590-A1.

PN

XX 04-SEP-2003.

XX

PF 28-JAN-2003; 2003WO-US002510.

PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX

PA (SIRN-) SIRNA THERAPEUTICS INC.

XX

XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;

PI

XX WPI; 2003-689980/65.

DR

XX

XX New short interfering nucleic acid, useful e.g. for treatment and

PT diagnosis of cancer, downregulates expression of mitogen-activated

PT protein kinase genes.

PT

XX Example 3; SEQ ID NO 462; 164pp; English.

PS

XX The present invention describes a short interfering nucleic acid (siNA)

CC that downregulates expression of a mitogen-activated protein kinase

CC (MAPK) genes by RNA interference. Also described: (1) a method for

CC modulating expression of MAPK genes in cells, tissue explants or

CC organisms by introduction of siNA; (2) kits for in vitro or in vivo

CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)

CC vectors that express siNA and cells containing these vectors. MAPK siNAs

CC have cytostatic, anorectic, antidiabetic, antiinflammatory,

CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,

CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK

CC siNAs can be used to modulate the expression of MAPK genes, in cells,

CC tissue explants or organisms, e.g. for treating obesity; diabetes types I

CC and II; a wide range of tumours, and inflammatory diseases (asthma,

CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel

CC disease). They can also be used for drug screening; diagnosis; target

CC identification and validation; genetic engineering; pharmacogenomics;

CC studying gene function and gene mapping (e.g. of single-nucleotide

CC polymorphisms). The present sequence represents a MAPK siNA which is used

CC in the exemplification of the present invention.

XX

XX Sequence 19 BP; 4 A; 4 C; 6 G; 0 T; 5 U; 0 Other;

SQ

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 8.4e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

CC that express siNA; and (5) single-stranded siNA with similar properties.
 CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
 CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
 CC gynaecological activities. The siNA are useful for modulating
 CC (downregulating) the expression of VEGFR genes. The siNA are potentially
 CC useful for treating a wide range of angiogenesis-associated conditions,
 CC particularly cancers, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
 CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
 CC drug screening, target identification and validation, genetic
 CC engineering, studying gene function, and also for gene mapping (e.g. of
 CC single-nucleotide polymorphisms). The present sequence is used in the
 CC exemplification of the present invention.
 XX
 SQ Sequence 19 BP; 6 A; 7 C; 5 G; 0 T; 1 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 8.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1033 GACTTGGCCTGGCCCGAG 1051
 DB 19 GATTTGGCCTGGCCCGG 1
 RESULT 919
 ADF37638/C
 ID ADF37638 standard; RNA; 19 BP.
 XX
 AC ADF37638;
 XX
 DT 12-FEB-2004 (first entry)
 XX
 DE Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1927.
 XX
 KW double-stranded short interfering nucleic acid;
 KW short interfering nucleic acid; siNA; downregulation;
 KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
 KW cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
 KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
 KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
 KW arthritis; psoriasis; endometriosis; angiofibroma;
 KW polycystic kidney disease; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO2003070910-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 20-FEB-2003; 2003WO-US005022.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 29-MAY-2002; 2002WO-US017674.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 03-JUL-2002; 2002US-0393796P.
 PR 29-JUL-2002; 2002US-0399348P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 04-NOV-2002; 2002US-0028794P.
 PR 27-NOV-2002; 2002US-0030674P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen J, Beigelman L, Pavco P;
 XX
 DR WPI; 2003-679876/64.
 XX
 XX New double-stranded interfering nucleic acid, useful e.g. for treatment

PT and diagnosis of cancer, downregulates the vascular endothelial growth
 PT factor receptor gene.
 XX
 PS Example 3; SEQ ID NO 1927; 207pp; English.
 XX
 The present invention describes a double-stranded short interfering
 CC nucleic acid (siNA) that downregulates expression of the vascular
 CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
 CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
 CC that express siNA; and (5) single-stranded siNA with similar properties.
 CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
 CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
 CC gynaecological activities. The siNA are useful for modulating
 CC (downregulating) the expression of VEGFR genes. The siNA are potentially
 CC useful for treating a wide range of angiogenesis-associated conditions,
 CC particularly cancers, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
 CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
 CC drug screening, target identification and validation, genetic
 CC engineering, studying gene function, and also for gene mapping (e.g. of
 CC single-nucleotide polymorphisms). The present sequence is used in the
 CC exemplification of the present invention.
 XX
 SQ Sequence 19 BP; 5 A; 6 C; 6 G; 0 T; 2 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 8.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1036 TTGTGGCCTGGCCCGAGCCA 1054
 DB 19 TTGTGGCCTGGCCCGGACA 1
 RESULT 920
 ADF35899
 ID ADF35899 standard; RNA; 19 BP.
 XX
 AC ADF35899;
 XX
 DT 12-FEB-2004 (first entry)
 XX
 DE Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:188.
 XX
 KW double-stranded short interfering nucleic acid;
 KW short interfering nucleic acid; siNA; downregulation;
 KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
 KW cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
 KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
 KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
 KW arthritis; psoriasis; endometriosis; angiofibroma;
 KW polycystic kidney disease; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO2003070910-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 20-FEB-2003; 2003WO-US005022.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 29-MAY-2002; 2002WO-US017674.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 03-JUL-2002; 2002US-0393796P.
 PR 29-JUL-2002; 2002US-0399348P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 04-NOV-2002; 2002US-0028794P.

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PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Pavco P;
XX WPI; 2003-679876/64.
XX
PT New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
XX Example 3; SEQ ID NO 188; 207pp; English.
XX
CC The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
CC opthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC synaescological activities. The siNA are useful for modulating
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
CC drug screening, target identification and validation, genetic
CC engineering, studying gene function, and also for gene mapping (e.g. of
CC single-nucleotide polymorphisms). The present sequence is used in the
CC exemplification of the present invention.
XX
SQ Sequence 19 BP; 1 A; 5 C; 7 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 63.2%; Pred. No. 8.4e+02;
Matches 12; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGCGCCGAG 1051
|| :|||:|||||
DB 1 GAUUUGGCCUUGCCCGG 19

RESULT 921
ADF95015/c
ID ADF95015 standard; DNA; 19 BP.
XX
AC ADF95015;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human interferon alpha 2 quantitative PCR primer, SEQ ID:51.
XX
KW Human keratinocyte derived interferon; human KDI; agonist; antagonist;
KW inding partner identification; immune-related disorder; cancer;
KW viral infection; viral exposure; immunomodulator; virucide; cytostatic;
KW gene therapy; interferon alpha 2; expression analysis; quantitative PCR;
KW primer; ss.
XX
OS Homo sapiens.
XX
PN WO2003031566-A2.
XX
PD 17-APR-2003.
XX
PF 19-JUL-2002; 2002WO-US023214.
XX
XX 20-JUL-2001; 2001US-00908594.
PR 06-DEC-2001; 2001US-0336165P.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
PI

XX Lafleur DW, Moore PA, Ruben SM;
XX WPI; 2003-381702/36.
XX
XX New isolated keratinocyte derived interferon (KDI) polypeptide, useful
XX for preventing, treating or ameliorating a medical condition, such as an
XX immune-related disorder, a viral infection, a viral exposure or cancer.
XX
XX Example 5; SEQ ID NO 51; 398pp; English.
XX
CC The invention relates to human keratinocyte derived interferon (KDI;
CC ADF94966) and nucleic acids encoding it (ADF94965). The KDI gene is
CC located on chromosome 9q22. The invention also relates to sequences at
CC least 70% identical to the KDI nucleic acid and protein sequences; a
CC polypeptide comprising an epitope-bearing portion of KDI; recombinant
CC vectors and host cells comprising a KDI nucleic acid sequence; a method
CC for the recombinant expression of KDI proteins; a KDI-specific antibody;
CC KDI agonists and antagonists; use of KDI nucleic acids or proteins for
CC treating medical conditions; a method for the diagnosis of a pathological
CC condition or susceptibility to a pathological condition; and methods of
CC screening for KDI binding partners. The KDI polypeptides and
CC polynucleotides, and methods of the invention are useful for preventing,
CC treating or ameliorating a medical condition, such as an immune-related
CC disorder, cancer, or a viral infection or viral exposure. The present
CC sequence is related to the invention.
XX
SQ Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 926 TCCAGCTGCTCCGTGGCCT 944
|| :|||:|||||
DB 19 TCAAGCTGCTCTGTGGCT 1

RESULT 922
ADF84085
ID ADF84085 standard; RNA; 19 BP.
XX
AC ADF84085;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human breakpoint cluster region-targeted siRNA - SEQ ID 379.
XX
KW short interfering nucleic acid; siNA; breakpoint cluster region;
KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW cytostatic; leukaemia; lymphoma; human; BCR; ss; siRNA.
XX
OS Homo sapiens.
XX
PN WO2003070972-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005234.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 15-AUG-2002; 2002US-0404039P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 14-JAN-2003; 2003US-0439922P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J, Beigelman L, Chowrira B;
PI
```

```
XX DR WPI; 2003-679889/64.
XX
XX PT New double-stranded interfering nucleic acid, useful e.g. for treatment
XX PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX PT cluster region-Abelson (BCR-ABL) gene.
XX PS Example 7; SEQ ID NO 379; 197pp; English.
XX
XX CC The invention relates to a novel double-stranded short interfering
XX CC nucleic acid (siNA) that downregulates expression of the breakpoint
XX CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
XX CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
XX CC activity and may be useful for modulating expression of the BCR-ABL gene,
XX CC as well as for treating leukaemia or lymphoma and in diagnosis, drug
XX CC screening, target identification and validation, genetic engineering,
XX CC gene function studies and gene mapping. The current sequence is that of
XX CC the human BCR-targeted siRNA of the invention.
XX SQ Sequence 19 BP; 3 A; 3 C; 11 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 73.7%; Pred. No. 8.4e+02;
Matches 14; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
QY 228 GAGTGGTGGTGGTGGCGGC 246
DB 1 GAGAGGUGGUGGACGCGGC 19
RESULT 923
ADF84200/c
ID ADF84200 standard; RNA; 19 BP.
AC ADF84200;
XX
XX DT 26-FEB-2004 (first entry)
XX
XX DE Human breakpoint cluster region-targeted siRNA - SEQ ID 494.
XX
XX KW short interfering nucleic acid; siNA; breakpoint cluster region;
XX KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
XX KW cytostatic; leukaemia; lymphoma; human; BCR; ss; siRNA.
XX
XX OS Homo sapiens.
XX
XX PN WO2003070972-A2.
XX
XX PD 28-AUG-2003.
XX
XX PF 20-FEB-2003; 2003WO-US005234.
XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 15-AUG-2002; 2002US-0404039P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 14-JAN-2003; 2003US-0439922P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX PI Mcswiggen J, Beigelman L, Chowrira B;
XX WPI; 2003-679889/64.
XX
XX DR New double-stranded interfering nucleic acid, useful e.g. for treatment
XX PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX PT cluster region-Abelson (BCR-ABL) gene.
XX
XX PS Example 7; SEQ ID NO 494; 197pp; English.
```

```
XX CC The invention relates to a novel double-stranded short interfering
XX CC nucleic acid (siNA) that downregulates expression of the breakpoint
XX CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
XX CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
XX CC activity and may be useful for modulating expression of the BCR-ABL gene,
XX CC as well as for treating leukaemia or lymphoma and in diagnosis, drug
XX CC screening, target identification and validation, genetic engineering,
XX CC gene function studies and gene mapping. The current sequence is that of
XX CC the human BCR-targeted siRNA of the invention.
XX SQ Sequence 19 BP; 2 A; 3 C; 9 G; 0 T; 5 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 673 AGCAAGCTTCACAGACAACC 691
DB 19 AGCAAGCTTCCTGCCAACC 1
RESULT 924
ADF84316
ID ADF84316 standard; RNA; 19 BP.
XX
XX AC ADF84316;
XX
XX DT 26-FEB-2004 (first entry)
XX
XX DE Human ABL1-targeted siRNA - SEQ ID 610.
XX
XX KW short interfering nucleic acid; siNA; breakpoint cluster region;
XX KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
XX KW cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
XX
XX OS Homo sapiens.
XX
XX PN WO2003070972-A2.
XX
XX PD 28-AUG-2003.
XX
XX PF 20-FEB-2003; 2003WO-US005234.
XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 15-AUG-2002; 2002US-0404039P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 14-JAN-2003; 2003US-0439922P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX PI Mcswiggen J, Beigelman L, Chowrira B;
XX WPI; 2003-679889/64.
XX
XX DR New double-stranded interfering nucleic acid, useful e.g. for treatment
XX PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX PT cluster region-Abelson (BCR-ABL) gene.
XX
XX PS Example 7; SEQ ID NO 610; 197pp; English.
XX
XX CC The invention relates to a novel double-stranded short interfering
XX CC nucleic acid (siNA) that downregulates expression of the breakpoint
XX CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
XX CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
XX CC activity and may be useful for modulating expression of the BCR-ABL gene,
XX CC as well as for treating leukaemia or lymphoma and in diagnosis, drug
XX CC screening, target identification and validation, genetic engineering,
```

CC gene function studies and gene mapping. The current sequence is that of
CC the human ABL1-targeted siRNA of the invention.

XX
SQ Sequence 19 BP; 3 A; 3 C; 6 G; 0 T; 7 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 52.6%; Pred. No. 8.4e+02;

Matches 10; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

QY 1025 AGCTGGCTGACTTTGGCCT 1043

DB 1 AGGAGCUGAUUUUGCCU 19

RESULT 925

ADP84438

ID ADF84438 standard; RNA; 19 BP.

XX

AC ADF84438;

XX 26-FEB-2004 (first entry)

DT

DE Human ABL1-targeted siRNA - SEQ ID 732.

XX

KW

short interfering nucleic acid; siRNA; breakpoint cluster region;

KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;

KW cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.

XX

OS Homo sapiens.

XX

PN WO2003070972-A2.

XX

XX 28-AUG-2003.

PD

PF 20-FEB-2003; 2003WO-US005234.

XX

PR 20-FEB-2002; 2002US-0358580P.

PR

PR 11-MAR-2002; 2002US-0363124P.

PR

PR 06-JUN-2002; 2002US-0386782P.

PR

PR 15-AUG-2002; 2002US-0404039P.

PR

PR 29-AUG-2002; 2002US-0406784P.

PR

PR 05-SEP-2002; 2002US-0408378P.

PR

PR 09-SEP-2002; 2002US-0409293P.

PR

PR 14-JAN-2003; 2003US-0439922P.

PR

PR 15-JAN-2003; 2003US-0440129P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

XX

PI McSwiggen J, Beigelman L, Chowrira B;

XX

XX WPI; 2003-679889/64.

DR

XX New double-stranded interfering nucleic acid, useful e.g. for treatment

PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint

PT cluster region-Abelson (BCR-ABL) gene.

XX

XX Example 7; SEQ ID NO 732; 197pp; English.

PS

CC The invention relates to a novel double-stranded short interfering

CC nucleic acid (siRNA) that downregulates expression of the breakpoint

CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1

CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic

CC activity and may be useful for modulating expression of the BCR-ABL gene,

CC as well as for treating leukemia or lymphoma and in diagnosis, drug

CC screening, target identification and validation, genetic engineering, of

CC gene function studies and gene mapping. The current sequence is that of

CC the human ABL1-targeted siRNA of the invention.

XX

SQ Sequence 19 BP; 6 A; 7 C; 3 G; 0 T; 3 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 14.2; DB 1; Length 19;

Matches 14; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 452 CCACTGAGGACATCAACA 470

DB 1 CCACUCAGGACUUCAGCA 19

RESULT 926

ADP84757/c

ID ADF84757 standard; RNA; 19 BP.

XX

AC ADF84757;

XX

XX 26-FEB-2004 (first entry)

DT

XX Human ABL1-targeted siRNA - SEQ ID 1051.

XX

KW short interfering nucleic acid; siRNA; breakpoint cluster region;

KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;

KW cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.

XX

OS Homo sapiens.

XX

PN WO2003070972-A2.

XX

XX 28-AUG-2003.

XX

XX 20-FEB-2003; 2003WO-US005234.

XX

XX 20-FEB-2002; 2002US-0358580P.

PR

PR 11-MAR-2002; 2002US-0363124P.

PR

PR 06-JUN-2002; 2002US-0386782P.

PR

PR 15-AUG-2002; 2002US-0404039P.

PR

PR 29-AUG-2002; 2002US-0406784P.

PR

PR 05-SEP-2002; 2002US-0408378P.

PR

PR 09-SEP-2002; 2002US-0409293P.

PR

PR 14-JAN-2003; 2003US-0439922P.

PR

PR 15-JAN-2003; 2003US-0440129P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

XX

PI McSwiggen J, Beigelman L, Chowrira B;

XX

XX WPI; 2003-679889/64.

DR

XX New double-stranded interfering nucleic acid, useful e.g. for treatment

PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint

PT cluster region-Abelson (BCR-ABL) gene.

XX

XX Example 7; SEQ ID NO 1051; 197pp; English.

PS

CC The invention relates to a novel double-stranded short interfering

CC nucleic acid (siRNA) that downregulates expression of the breakpoint

CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1

CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic

CC activity and may be useful for modulating expression of the BCR-ABL gene,

CC as well as for treating leukemia or lymphoma and in diagnosis, drug

CC screening, target identification and validation, genetic engineering,

CC gene function studies and gene mapping. The current sequence is that of

CC the human ABL1-targeted siRNA of the invention.

XX

SQ Sequence 19 BP; 3 A; 3 C; 7 G; 0 T; 6 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 14.2; DB 1; Length 19;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 452 CCACTGAGGACATCAACA 470

DB 19 CCACCTCAGGACTTCAGCA 1

RESULT 927

ADP83937


```
ID ADF83937 standard; RNA; 19 BP.
XX
AC ADF83937;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human breakpoint cluster region-targeted siRNA - SEQ ID 231.
XX
XX short interfering nucleic acid; siNA; breakpoint cluster region;
KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW cytosstatic; leukaemia; lymphoma; human; BCR; ss; siRNA.
XX
OS Homo sapiens.
XX
PN WO2003070972-A2.
XX
PD 28-AUG-2003.
XX
XX short interfering nucleic acid; siNA; breakpoint cluster region;
KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW cytosstatic; leukaemia; lymphoma; human; BCR; ss; siRNA.
XX
OS Homo sapiens.
XX
PN WO2003070972-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005234.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 15-AUG-2002; 2002US-0404039P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 14-JAN-2003; 2003US-0439922P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Chowrira B;
XX WPI; 2003-679889/64.
XX
DR New double-stranded interfering nucleic acid, useful e.g. for treatment
XX PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX PT cluster region-Abelson (BCR-ABL) gene.
XX
XX Example 7; SEQ ID NO 231; 197pp; English.
XX
CC The invention relates to a novel double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the breakpoint
CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
CC activity and may be useful for modulating expression of the BCR-ABL gene,
CC as well as for treating leukaemia or lymphoma and in diagnosis, drug
CC screening, target identification and validation, genetic engineering, of
CC gene function studies and gene mapping. The current sequence is that of
CC the human BCR-targeted siRNA of the invention.
XX
SQ Sequence 19 BP; 5 A; 9 C; 3 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 8.4e+02;
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 673 AGCAAGCTCACAGACAACC 691
|||||||:|:|:|:|
DB 1 AGCAAGCUCCUGCCCAACC 19
RESULT 928
ADP84635/c
ID ADF84635 standard; RNA; 19 BP.
XX
XX ADF84635;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human ABL1-targeted siRNA - SEQ ID 929.
XX
```

```
KW short interfering nucleic acid; siNA; breakpoint cluster region;
KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
XX cytosstatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
XX
OS Homo sapiens.
XX
PN WO2003070972-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005234.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 15-AUG-2002; 2002US-0404039P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 14-JAN-2003; 2003US-0439922P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Chowrira B;
XX WPI; 2003-679889/64.
XX
DR New double-stranded interfering nucleic acid, useful e.g. for treatment
XX PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX PT cluster region-Abelson (BCR-ABL) gene.
XX
XX Example 7; SEQ ID NO 929; 197pp; English.
XX
CC The invention relates to a novel double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the breakpoint
CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
CC activity and may be useful for modulating expression of the BCR-ABL gene,
CC as well as for treating leukaemia or lymphoma and in diagnosis, drug
CC screening, target identification and validation, genetic engineering, of
CC gene function studies and gene mapping. The current sequence is that of
CC the human ABL1-targeted siRNA of the invention.
XX
SQ Sequence 19 BP; 7 A; 6 C; 3 G; 0 T; 3 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1025 AGCTGGCTGACTTTGGCCT 1043
|||||||:|:|:|:|
DB 19 AGGTAGCTGATTTGGCCT 1
RESULT 929
ADP83822/c
ID ADF83822 standard; RNA; 19 BP.
XX
XX ADF83822;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human breakpoint cluster region-targeted siRNA - SEQ ID 116.
XX
XX short interfering nucleic acid; siNA; breakpoint cluster region;
KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW cytosstatic; leukaemia; lymphoma; human; BCR; ss; siRNA.
XX
OS Homo sapiens.
XX
PN WO2003070972-A2.
XX
```

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PD 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005234.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX
XX 11-MAR-2002; 2002US-0363124P.
XX
XX 06-JUN-2002; 2002US-0386782P.
XX
XX 15-AUG-2002; 2002US-0404039P.
XX
XX 29-AUG-2002; 2002US-0406784P.
XX
XX 05-SEP-2002; 2002US-0408378P.
XX
XX 03-SEP-2002; 2002US-0409293P.
XX
XX 14-JAN-2003; 2003US-0439922P.
XX
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX McSwiggen J, Beigelman L, Chowrira B;
XX
XX WPI; 2003-679889/64.
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
XX and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX cluster region-Abelson (BCR-ABL) gene.
XX
XX Example 7; SEQ ID NO 116; 197pp; English.
XX
XX The invention relates to a novel double-stranded short interfering
XX nucleic acid (siRNA) that downregulates expression of the breakpoint
XX cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
XX (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
XX activity and may be useful for modulating expression of the BCR-ABL gene,
XX as well as for treating leukaemia or lymphoma and in diagnosis, drug
XX screening, target identification and validation, genetic engineering,
XX gene function studies and gene mapping. The current sequence is that of
XX the human BCR-targeted siRNA of the invention.
XX
XX Sequence 19 BP; 2 A; 11 C; 3 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 8.4e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 228 GAGTGGTGGTGGTGGCGGC 246
XX ||| ||||| |||||
XX 19 GAGAGGTGGTGGCGCGC 1
XX
XX RESULT 930
XX ADO15165
XX ID ADO15165 standard; RNA; 19 BP.
XX
XX AC ADO15165;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human PDGFR-targeted siRNA lower strand SEQ ID NO:596.
XX
XX cytostatic; vasotropic; nephrotropic; cerebroprotective;
XX treating leukaemia; solid tumors; restenosis; polycystic kidney disease;
XX bronchiolitis; glomerulonephritis; stroke; RNA interference;
XX short interfering nucleic acid; siRNA; short interfering RNA; siRNA;
XX double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
XX expression modulation; gene therapy; drug screening; diagnosis;
XX therapeutic target identification; pharmacogenomics;
XX gene function analysis; gene mapping; human;
XX platelet derived growth factor receptor; PDGFR; ss.
XX
XX Homo sapiens.
XX
XX WO2003072704-A2.
XX
XX 04-SEP-2003.
XX
XX

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PF 05-FEB-2003; 2003WO-US003473.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX
XX 11-MAR-2002; 2002US-0363124P.
XX
XX 06-JUN-2002; 2002US-0386782P.
XX
XX 29-AUG-2002; 2002US-0406784P.
XX
XX 05-SEP-2002; 2002US-0408378P.
XX
XX 09-SEP-2002; 2002US-0409293P.
XX
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX McSwiggen J, Beigelman L, Chowrira B;
XX
XX WPI; 2003-731605/69.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of tumors, downregulates expression of the platelet-derived
XX growth factor receptor gene.
XX
XX Example 3; SEQ ID NO 596; 148pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the human platelet-derived growth factor
XX receptor (PDGFR) gene by RNA interference. The siNAs may or may not
XX comprise ribonucleotides and may be double or single stranded. They
XX further comprise sense and antisense regions, or alternatively are
XX assembled from a sense oligonucleotide and an antisense oligonucleotide.
XX Specifically, the siNAs include short interfering RNA (siRNA, double-
XX stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
XX can be unmodified or chemically modified, can contain
XX deoxyribonucleotides, and can be chemically synthesised, expressed from a
XX vector or enzymatically synthesised. The invention also relates to kits
XX for the in vitro or in vivo delivery of siRNA; conjugates and/or
XX complexes of siRNA; and vectors that express siNA. The siNAs are used to
XX modulate expression of the PDGFR gene in cells, tissue explants or
XX organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
XX for the treatment of a variety of conditions. They may be used for
XX treating leukaemia and solid tumours, restenosis, polycystic kidney
XX disease, bronchiolitis, glomerulonephritis and stroke. The siNAs are also
XX useful for drug screening, diagnosis, therapeutic target identification
XX and validation, genetic engineering, pharmacogenomics, studying gene
XX function, and gene mapping (e.g., of single nucleotide polymorphisms).
XX The present sequence represents the lower strand of a human PDGFR-
XX targeted double-stranded siNA, which is identical to the PDGFR transcript
XX target sequence.
XX
XX Sequence 19 BP; 2 A; 8 C; 2 G; 0 T; 7 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 57.9%; Pred. No. 8.4e+02;
XX Matches 11; Conservative 5; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1109 CCCCTGACATCCTGCTTGG 1127
XX ||| ||||| |||||
XX 1 CCUCUCACAUCCUUCUUGG 19
XX
XX RESULT 931
XX ADO14854/c
XX ID ADO14854 standard; RNA; 19 BP.
XX
XX AC ADO14854;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human PDGFR-targeted siNA upper strand SEQ ID NO:285.
XX
XX cytostatic; vasotropic; nephrotropic; cerebroprotective;
XX treating leukaemia; solid tumors; restenosis; polycystic kidney disease;
XX bronchiolitis; glomerulonephritis; stroke; RNA interference;
XX short interfering nucleic acid; siRNA; short interfering RNA; siRNA;
XX double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;

```

```

KW expression modulation; gene therapy; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; human;
KW platelet derived growth factor receptor; PDGFR; ss.
XX
OS Homo sapiens.
XX
PN WO2003072704-A2.
XX
PD 04-SEP-2003.
XX
PF 05-FEB-2003; 2003WO-US003473.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Chowrira B;
XX WPI; 2003-731605/69.
XX
DR New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of tumors, downregulates expression of the platelet-derived
PT growth factor receptor gene.
XX
PS Example 3; SEQ ID NO 285; 148pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human platelet-derived growth factor
CC receptor (PDGFR) gene by RNA interference. The siNAs may or may not
CC comprise ribonucleotides and may be double or single stranded. They
CC further comprise a sense and antisense regions, or alternatively are
CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
CC Specifically, the siNAs include short interfering RNA (siRNA), double-
CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
CC can be unmodified or chemically modified, can contain
CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
CC vector or enzymatically synthesised. The invention also relates to kits
CC for the in vitro or in vivo delivery of siRNA; conjugates and/or
CC complexes of siRNA; and vectors that express siNA. The siNAs are used to
CC modulate expression of the PDGFR gene in cells, tissue explants or
CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
CC for the treatment of a variety of conditions. They may be used for
CC treating leukaemia and solid tumours, restenosis, polycystic kidney
CC disease, bronchiolitis, glomerulonephritis and stroke. The siNAs are also
CC useful for drug screening, diagnosis, therapeutic target identification
CC and validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the upper strand of a human PDGFR-
CC targeted double-stranded siNA, which is identical to the PDGFR transcript
CC target sequence.
XX
SQ Sequence 19 BP; 7 A; 2 C; 8 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1109 CCCCTGACATCCTCTGTGG 1127
DB |||||
19 CCTCTCACATCCTCTGTGG 1

RESULT 932
AD126828/c
ID AD126828 standard; DNA; 19 BP.
XX

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AC AD126828;
XX
DT 22-APR-2004 (first entry)
XX
DE Mouse cyclin dependent kinase 4 primer seq id 6.
XX
KW cytostatic; antidiabetic; antiinfertility; gene therapy;
KW cyclin-dependent kinase 4; diabetes; infertility;
KW hyperproliferative disorder; cancer; antisense technology; mouse; PCR;
KW primer; ss.
XX
OS Mus musculus.
XX
PN US2004005567-A1.
XX
PD 08-JAN-2004.
XX
PF 02-JUL-2002; 2002US-00188779.
XX
PR 02-JUL-2002; 2002US-00188779.
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX Dean NM, Freier SM, Dobie KW;
XX WPI; 2004-081710/08.
XX
DR New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding cyclin-dependent kinase 4, useful for preparing a
PT composition for treating diabetes, infertility or hyperproliferative
PT disorder, e.g., cancer.
XX
PS Example 13; SEQ ID NO 13; 90pp; English.
XX
CC The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclin-
CC dependent kinase 4, specifically hybridises with the nucleic acid
CC encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-
CC dependent kinase 4. The antisense oligonucleotide is useful for preparing
CC a composition for treating diabetes, infertility or hyperproliferative
CC disorder, e.g., cancer. This sequence represents a primer used in the
CC isolation of DNA encoding mouse cyclin dependent kinase 4.
XX
SQ Sequence 19 BP; 5 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1153 GACATGTGGGGTGGGCT 1171
DB |||||
19 GACATGTGGAGCGTTGGCT 1

RESULT 933
AD018297
ID AD018297 standard; DNA; 19 BP.
XX
AC AD018297;
XX
DT 15-JUL-2004 (first entry)
XX
DE Analytical probe chip of the invention #56.
XX
KW analytical chip; bacterial 16S-rRNA; genotypic characterization; probe;
KW ss.
XX
OS Synthetic.
XX
PN WO2004033720-A2.
XX
PD 22-APR-2004.
XX

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PF 24-SEP-2003; 2003WO-EP010626.
 XX
 PR 09-OCT-2002; 2002EP-00022631.
 XX
 PA (UYGE-) UNIV GENEVE HOPITAUX.
 XX
 PI Schrenzel J, Francois P, Charbonnier Y, Jacquet JG, Uttinger D;
 PI Kresbach GM, Abel A, Ehrat M;
 XX WPI; 2004-375537/35.
 DR
 XX Analytical chip useful for simultaneous determination of one or more
 PT different bacterial 16S-rRNA in liquid sample, comprising evanescent
 PT field measurement platform as solid carrier and several specific
 PT recognition elements.
 XX
 PS Claim 1; SEQ ID NO 56; 82pp; English.
 XX
 CC The present invention relates to an analytical chip for simultaneous
 CC determination of one or more different bacterial 16S-rRNA in liquid
 CC sample. The chip is useful for detecting one or more bacterial 16S-rRNA,
 CC derived from bacteria such as *Achromobacter xylosoxidans*, *Acinetobacter*
 CC *baumannii*, *Acinomyces israelii*, *Aerococcus viridans*, *Aeromonas*
 CC *hydrophila*, *Agrobacterium radiobacter*, *Bacillus sp.*, *Bacteroides*
 CC *ovatus*, *Campylobacter fetus*, *Citrobacter freundii*, *Enterococcus avium*
 CC *Eubacterium lentum*, *Escherichia coli*, *Flavobacterium breve*,
 CC *Fusobacterium nucleatum*, *Gemella morbillorum*, *Gardnerella vaginalis*,
 CC *Haemophilus influenzae*, *Hafnia alvei*, *Kingella sp.*, *Klebsiella oxytoca*
 CC *catarrhalis*, *Mycobacterium avium*, *Neisseria cinerea*, *Nocardia sp.*,
 CC *Ochrobactrum anthropi*, *Pasteurella multocida*, *Peptostreptococcus magnus*
 CC *Salmonella typhi*, *Shigella sonnei*, *Veillonella parvula*, *Veillonella*
 CC *sp.* or *Versinia enterocolitica*. The chip is useful for detecting
 CC clinically relevant bacteria. The chip enables determination of one or
 CC more different bacterial 16S-rRNA in a liquid sample, simultaneously and
 CC enables rapid, accurate, easy and reliable identification of bacteria by
 CC genotypic characterization in a provided sample and also enables
 CC identification of a bacterium even in a complex biological sample. The
 CC chip which is produced at reduced cost, enables determination of 16S-rRNA
 CC in a sample with reduced experimental error and variation. The present
 CC sequence represents a probe of the invention used as an analytical chip.
 XX
 SQ Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 8.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1440 TGGCATGAAACATCCATTC 1458
 || ||||| ||||| ||
 Db 1 TGTGATGACATCCACTC 19
 RESULT 934
 ADO18256
 ID ADO18256 standard; DNA; 19 BP.
 XX
 AC ADO18256;
 XX
 DT 15-JUL-2004 (first entry)
 DE Analytical probe chip of the invention #15.
 XX
 XX analytical chip; bacterial 16S-rRNA; genotypic characterization; probe;
 XX ss.
 OS Synthetic.
 XX
 PN WO2004033720-A2.
 XX
 PD 22-APR-2004.
 XX
 PF 24-SEP-2003; 2003WO-EP010626.

XX
 PR 09-OCT-2002; 2002EP-00022631.
 XX
 PA (UYGE-) UNIV GENEVE HOPITAUX.
 XX
 PI Schrenzel J, Francois P, Charbonnier Y, Jacquet JG, Uttinger D;
 PI Kresbach GM, Abel A, Ehrat M;
 XX WPI; 2004-375537/35.
 DR
 XX Analytical chip useful for simultaneous determination of one or more
 PT different bacterial 16S-rRNA in liquid sample, comprising evanescent
 PT field measurement platform as solid carrier and several specific
 PT recognition elements.
 XX
 PS Claim 1; SEQ ID NO 15; 82pp; English.
 XX
 CC The present invention relates to an analytical chip for simultaneous
 CC determination of one or more different bacterial 16S-rRNA in liquid
 CC sample. The chip is useful for detecting one or more bacterial 16S-rRNA,
 CC derived from bacteria such as *Achromobacter xylosoxidans*, *Acinetobacter*
 CC *baumannii*, *Acinomyces israelii*, *Aerococcus viridans*, *Aeromonas*
 CC *hydrophila*, *Agrobacterium radiobacter*, *Bacillus sp.*, *Bacteroides*
 CC *ovatus*, *Campylobacter fetus*, *Citrobacter freundii*, *Enterococcus avium*
 CC *Eubacterium lentum*, *Escherichia coli*, *Flavobacterium breve*,
 CC *Fusobacterium nucleatum*, *Gemella morbillorum*, *Gardnerella vaginalis*,
 CC *Haemophilus influenzae*, *Hafnia alvei*, *Kingella sp.*, *Klebsiella oxytoca*
 CC *catarrhalis*, *Mycobacterium avium*, *Neisseria cinerea*, *Peptostreptococcus magnus*
 CC *Ochrobactrum anthropi*, *Pasteurella multocida*, *Veillonella parvula*, *Veillonella*
 CC *sp.* or *Versinia enterocolitica*. The chip is useful for detecting
 CC clinically relevant bacteria. The chip enables determination of one or
 CC more different bacterial 16S-rRNA in a liquid sample, simultaneously and
 CC enables rapid, accurate, easy and reliable identification of bacteria by
 CC genotypic characterization in a provided sample and also enables
 CC identification of a bacterium even in a complex biological sample. The
 CC chip which is produced at reduced cost, enables determination of 16S-rRNA
 CC in a sample with reduced experimental error and variation. The present
 CC sequence represents a probe of the invention used as an analytical chip.
 XX
 SQ Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 8.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1440 TGGCATGAAACATCCATTC 1458
 || ||||| ||||| ||
 Db 1 TGTGATGACATCCACTC 19
 RESULT 935
 ADO18296
 ID ADO18296 standard; DNA; 19 BP.
 XX
 AC ADO18296;
 XX
 DT 15-JUL-2004 (first entry)
 DE Analytical probe chip of the invention #55.
 XX
 XX analytical chip; bacterial 16S-rRNA; genotypic characterization; probe;
 XX ss.
 OS Synthetic.
 XX
 PN WO2004033720-A2.
 XX
 PD 22-APR-2004.
 XX
 PF 24-SEP-2003; 2003WO-EP010626.

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PR 09-OCT-2002; 2002EP-00022631.
XX (UYGE-) UNIV GENEVE HOPITAUX.
XX
XX
XX Schrenzel J, Francois P, Charbonnier Y, Jacquet JG, Uttinger D;
XX Kresbach GM, Abel A, Ehrat M;
XX WPI; 2004-375537/35.
XX
XX Analytical chip useful for simultaneous determination of one or more
XX different bacterial 16S-rRNA in liquid sample, comprising evanescent
XX field measurement platform as solid carrier and several specific
XX recognition elements.
XX
XX Claim 1; SEQ ID NO 55; 82pp; English.
XX
XX The present invention relates to an analytical chip for simultaneous
XX determination of one or more different bacterial 16S-rRNA in liquid
XX sample. The chip is useful for detecting one or more bacterial 16S-rRNA,
XX derived from bacteria such as Achromobacter xylosoxidans, Acinetobacter
XX baumannii, Actinomyces israelii, Aerococcus viridans, Aeromonas
XX hydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacteroides
XX ovatus, Campylobacter fetus, Citrobacter freundii, Enterococcus avium
XX, Eubacterium lentum, Escherichia coli, Flavobacterium breve,
XX Fusobacterium nucleatum, Gemella morbillorum, Gardnerella vaginalis,
XX Haemophilus influenzae, Hafnia alvei, Kingella sp., Klebsiella oxytoca
XX, Lactobacillus acidophilus, Legionella pneumophila, Moraxella
XX catarrhalis, Mycobacterium avium, Neisseria cinerea, Nocardia sp.,
XX Ochrobactrum anthropi, Pasteurella multocida, Peptostreptococcus magnus
XX, Salmonella typhi, Shigella sonnei, Veillonella parvula, Veillonella
XX sp. or Versinia enterocolitica. The chip is useful for detecting
XX more different bacterial 16S-rRNA in a liquid sample, simultaneously and
XX enables rapid, accurate, easy and reliable identification of bacteria by
XX genotypic characterization in a provided sample and also enables
XX identification of a bacterium even in a complex biological sample. The
XX chip which is produced at reduced cost, enables determination of 16S-rRNA
XX in a sample with reduced experimental error and variation. The present
XX sequence represents a probe of the invention used as an analytical chip.
XX
XX Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 8.4e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1441 GCCATGAACATCCATCTCT 1459
XX Db 1 GTCATGCAACATCCACTCT 19
XX
XX RESULT 936
XX ADO18771
XX ID ADO18771 standard; DNA; 19 BP.
XX
XX AC ADO18771;
XX
XX DT 15-JUL-2004 (first entry)
XX
XX DE Analytical probe chip of the invention #530.
XX
XX KW analytical chip; bacterial 16S-rRNA; genotypic characterization; probe;
XX ss.
XX
XX OS Synthetic.
XX
XX PN WO2004033720-A2.
XX
XX PD 22-APR-2004.
XX
XX PF 24-SEP-2003; 2003WO-EP010626.
XX
XX PR 09-OCT-2002; 2002EP-00022631.

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XX
XX (UYGE-) UNIV GENEVE HOPITAUX.
XX
XX Schrenzel J, Francois P, Charbonnier Y, Jacquet JG, Uttinger D;
XX Kresbach GM, Abel A, Ehrat M;
XX WPI; 2004-375537/35.
XX
XX Analytical chip useful for simultaneous determination of one or more
XX different bacterial 16S-rRNA in liquid sample, comprising evanescent
XX field measurement platform as solid carrier and several specific
XX recognition elements.
XX
XX Claim 243; SEQ ID NO 530; 82pp; English.
XX
XX The present invention relates to an analytical chip for simultaneous
XX determination of one or more different bacterial 16S-rRNA in liquid
XX sample. The chip is useful for detecting one or more bacterial 16S-rRNA,
XX derived from bacteria such as Achromobacter xylosoxidans, Acinetobacter
XX baumannii, Actinomyces israelii, Aerococcus viridans, Aeromonas
XX hydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacteroides
XX ovatus, Campylobacter fetus, Citrobacter freundii, Enterococcus avium
XX, Eubacterium lentum, Escherichia coli, Flavobacterium breve,
XX Fusobacterium nucleatum, Gemella morbillorum, Gardnerella vaginalis,
XX Haemophilus influenzae, Hafnia alvei, Kingella sp., Klebsiella oxytoca
XX, Lactobacillus acidophilus, Legionella pneumophila, Moraxella
XX catarrhalis, Mycobacterium avium, Neisseria cinerea, Nocardia sp.,
XX Ochrobactrum anthropi, Pasteurella multocida, Peptostreptococcus magnus
XX, Salmonella typhi, Shigella sonnei, Veillonella parvula, Veillonella
XX sp. or Versinia enterocolitica. The chip is useful for detecting
XX clinically relevant bacteria. The chip enables determination of one or
XX more different bacterial 16S-rRNA in a liquid sample, simultaneously and
XX enables rapid, accurate, easy and reliable identification of bacteria by
XX genotypic characterization in a provided sample and also enables
XX identification of a bacterium even in a complex biological sample. The
XX chip which is produced at reduced cost, enables determination of 16S-rRNA
XX in a sample with reduced experimental error and variation. The present
XX sequence represents a probe of the invention used as an analytical chip.
XX
XX Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 8.4e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1440 TGCCATGAACATCCATCTC 1458
XX Db 1 TGTCTGCAACATCCACTCT 19
XX
XX RESULT 937
XX ADO18694
XX ID ADO18694 standard; DNA; 19 BP.
XX
XX AC ADO18694;
XX
XX DT 15-JUL-2004 (first entry)
XX
XX DE Analytical probe chip of the invention #453.
XX
XX KW analytical chip; bacterial 16S-rRNA; genotypic characterization; probe;
XX ss.
XX
XX OS Synthetic.
XX
XX PN WO2004033720-A2.
XX
XX PD 22-APR-2004.
XX
XX PF 24-SEP-2003; 2003WO-EP010626.
XX
XX PR 09-OCT-2002; 2002EP-00022631.

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PA (UYGE-) UNIV GENEVE HOPITAUX.
XX
XX Schrenzel J, Francois P, Charbonnier Y, Jacquet JG, Uttinger D;
PI Kresbach GM, Abel A, Ehrat M;
XX
XX WPI; 2004-375537/35.
XX
XX Analytical chip useful for simultaneous determination of one or more
PT different bacterial 16S-rRNA in liquid sample, comprising evanescent
PT field measurement platform as solid carrier and several specific
PT recognition elements.
XX
XX Claim 166; SEQ ID NO 453; 82pp; English.
PS
XX
XX The present invention relates to an analytical chip for simultaneous
CC determination of one or more different bacterial 16S-rRNA in liquid
CC sample. The chip is useful for detecting one or more bacterial 16S-rRNA,
CC derived from bacteria such as Achromobacter xylosoxidans, Acinetobacter
CC baumannii, Actinomyces israelii, Aerococcus viridans, Aeromonas
CC hydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacteroides
CC ovatus, Campylobacter fetus, Citrobacter freundii, Enterococcus avium
CC, Eubacterium lentum, Escherichia coli, Flavobacterium breve,
CC Fusobacterium nucleatum, Gemella morbillorum, Gardnerella vaginalis,
CC Haemophilus influenzae, Hafnia alvei, Kingella sp., Klebsiella oxytoca
CC catarrhalis, Mycobacterium avium, Neisseria cinerea, Nocardia sp.,
CC Ochrobactrum anthropi, Pasteurella multocida, Peptostreptococcus magnus
CC, Salmonella typhi, Shigella sonnei, Veillonella parvula, Veillonella
CC sp. or Versinia enterocolitica. The chip is useful for detecting
CC clinically relevant bacteria. The chip enables determination of one or
CC more different bacterial 16S-rRNA in a liquid sample, simultaneously and
CC enables rapid, accurate, easy and reliable identification of bacteria by
CC genotypic characterization in a provided sample and also enables
CC identification of a bacterium even in a complex biological sample. The
CC chip which is produced at reduced cost, enables determination of 16S-rRNA
CC in a sample with reduced experimental error and variation. The present
CC sequence represents a probe of the invention used as an analytical chip.
XX
XX Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1440 TGCATGCAACATCCATTC 1458
DB 1 TGTCTGCAACATCCACTC 19
RESULT 938
AD018756
ID ADO18756 standard; DNA; 19 BP.
XX
XX ADO18756;
AC
XX
XX 15-JUL-2004 (first entry)
DT
XX
XX Analytical probe chip of the invention #515.
DE
XX
XX analytical chip; bacterial 16S-rRNA; genotypic characterization; probe;
KW ss.
XX
XX Synthetic.
OS
XX
XX WO2004033720-A2.
PN
XX
XX 22-APR-2004.
PD
XX
XX 24-SEP-2003; 2003WO-EP010626.
PF
XX
XX 09-OCT-2002; 2002EP-00022631.
PR
XX
XX (UYGE-) UNIV GENEVE HOPITAUX.
PA

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XX
XX Schrenzel J, Francois P, Charbonnier Y, Jacquet JG, Uttinger D;
PI Kresbach GM, Abel A, Ehrat M;
XX
XX WPI; 2004-375537/35.
XX
XX Analytical chip useful for simultaneous determination of one or more
PT different bacterial 16S-rRNA in liquid sample, comprising evanescent
PT field measurement platform as solid carrier and several specific
PT recognition elements.
XX
XX Claim 228; SEQ ID NO 515; 82pp; English.
PS
XX
XX The present invention relates to an analytical chip for simultaneous
CC determination of one or more different bacterial 16S-rRNA in liquid
CC sample. The chip is useful for detecting one or more bacterial 16S-rRNA,
CC derived from bacteria such as Achromobacter xylosoxidans, Acinetobacter
CC baumannii, Actinomyces israelii, Aerococcus viridans, Aeromonas
CC hydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacteroides
CC ovatus, Campylobacter fetus, Citrobacter freundii, Enterococcus avium
CC, Eubacterium lentum, Escherichia coli, Flavobacterium breve,
CC Fusobacterium nucleatum, Gemella morbillorum, Gardnerella vaginalis,
CC Haemophilus influenzae, Hafnia alvei, Kingella sp., Klebsiella oxytoca
CC catarrhalis, Mycobacterium avium, Neisseria cinerea, Nocardia sp.,
CC Ochrobactrum anthropi, Pasteurella multocida, Peptostreptococcus magnus
CC, Salmonella typhi, Shigella sonnei, Veillonella parvula, Veillonella
CC sp. or Versinia enterocolitica. The chip is useful for detecting
CC clinically relevant bacteria. The chip enables determination of one or
CC more different bacterial 16S-rRNA in a liquid sample, simultaneously and
CC enables rapid, accurate, easy and reliable identification of bacteria by
CC genotypic characterization in a provided sample and also enables
CC identification of a bacterium even in a complex biological sample. The
CC chip which is produced at reduced cost, enables determination of 16S-rRNA
CC in a sample with reduced experimental error and variation. The present
CC sequence represents a probe of the invention used as an analytical chip.
XX
XX Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1441 GCCATGAACATCCATTC 1459
DB 1 GTCATGCAACATCCACTCT 19
RESULT 939
AD016007
ID ADO16007 standard; DNA; 19 BP.
XX
XX ADO16007;
AC
XX
XX 29-JUL-2004 (first entry)
DT
XX
XX 4 synthesis-period of neuroblastoma related primer, SEQ ID 269.
DE
XX
XX Human; 4 synthesis-period; neuroblastoma; stage 4S; primer; ss.
KW
XX
XX Synthetic.
OS
XX
XX WO2004039975-A1.
PN
XX
XX 13-MAY-2004.
PD
XX
XX 30-OCT-2003; 2003WO-JP013932.
PF
XX
XX 30-OCT-2002; 2002JP-00316586.
PR
XX
XX (HISM) HISAMITSU PHARM CO LTD.
PA (CHIB-) CHIBA PREFECTURE.
PA

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PI Nakagawara A, Ohira M;
XX WPI; 2004-390323/36.
XX
XX Novel nucleic acid obtained from 4 synthesis-period of neuroblastoma
PT cells useful for prognosing and determining progress stage of
PT neuroblastomas.
XX
XX Claim 8; SEQ ID NO 269; 455pp; Japanese.
XX
XX The present invention relates to human nucleic acid sequences (I;
CC ADO1579-ADO15912) obtained from 4 synthesis-period (stage 4S) of
CC neuroblastoma cell. (I) is useful for prognosing and determining the
CC progress stage of 4 synthesis-period of neuroblastoma. The present
CC sequence is a primer, used to illustrate the invention.
XX
XX Sequence 19 BP; 3 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1192 ACAGGCGCTCCCTCTTTC 1210
DB 1 ACAGGCGCTCCCTCTTTC 19

RESULT 940
AAQ24922
ID AAQ24922 standard; DNA; 20 BP.
XX
AC AAQ24922;
XX
DT 25-MAR-2003 (revised)
DT 19-NOV-1992 (first entry)
XX
DE Chicken alpha-globin primer (242).
XX
KW Single primer amplification; SPAR; ss.
XX
OS Synthetic.
XX
XX WO9207948-A1.
XX
XX 14-MAY-1992.
XX
XX 05-NOV-1991; 91WO-US008233.
XX
XX 06-NOV-1990; 90US-00610973.
XX
XX 29-JUL-1991; 91US-00737919.
XX
XX (LUBR ) LUBRIZOL CORP.
XX
PI Cardineau GA, Filner P;
XX
XX WPI; 1992-183683/22.
XX
XX Nucleic acid sequence single primer amplification - useful for genomic
PT variation analysis and polymorphism detection for restriction fragment
PT length data.
XX
XX Claim 16; Page 39; 65pp; English.
XX
XX The sequence originates from the chicken alpha-globin gene. It is the
CC complement of primer (227) (AAQ24908). The selected primer is used in
CC practice of the single primer amplification reaction (SPAR). (Updated on
CC 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 6 A; 10 C; 1 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

PI Nakagawara A, Ohira M;
XX WPI; 2004-390323/36.
XX
XX Novel nucleic acid obtained from 4 synthesis-period of neuroblastoma
PT cells useful for prognosing and determining progress stage of
PT neuroblastomas.
XX
XX Claim 8; SEQ ID NO 269; 455pp; Japanese.
XX
XX The present invention relates to human nucleic acid sequences (I;
CC ADO1579-ADO15912) obtained from 4 synthesis-period (stage 4S) of
CC neuroblastoma cell. (I) is useful for prognosing and determining the
CC progress stage of 4 synthesis-period of neuroblastoma. The present
CC sequence is a primer, used to illustrate the invention.
XX
XX Sequence 19 BP; 3 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1192 ACAGGCGCTCCCTCTTTC 1210
DB 1 ACAGGCGCTCCCTCTTTC 19

RESULT 940
AAQ24922
ID AAQ24922 standard; DNA; 20 BP.
XX
AC AAQ24922;
XX
DT 25-MAR-2003 (revised)
DT 19-NOV-1992 (first entry)
XX
DE Chicken alpha-globin primer (242).
XX
KW Single primer amplification; SPAR; ss.
XX
OS Synthetic.
XX
XX WO9207948-A1.
XX
XX 14-MAY-1992.
XX
XX 05-NOV-1991; 91WO-US008233.
XX
XX 06-NOV-1990; 90US-00610973.
XX
XX 29-JUL-1991; 91US-00737919.
XX
XX (LUBR ) LUBRIZOL CORP.
XX
PI Cardineau GA, Filner P;
XX
XX WPI; 1992-183683/22.
XX
XX Nucleic acid sequence single primer amplification - useful for genomic
PT variation analysis and polymorphism detection for restriction fragment
PT length data.
XX
XX Claim 16; Page 39; 65pp; English.
XX
XX The sequence originates from the chicken alpha-globin gene. It is the
CC complement of primer (227) (AAQ24908). The selected primer is used in
CC practice of the single primer amplification reaction (SPAR). (Updated on
CC 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 6 A; 10 C; 1 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1062 CCCAACAAAGACATACCTC 1080
DB 1 CCCAACAAAGACCTACTTC 19

RESULT 941
AAT11973/c
ID AAT11973 standard; DNA; 20 BP.
XX
AC AAT11973;
XX
DT 25-MAR-2003 (revised)
DT 13-MAR-1996 (first entry)
XX
DE CMV antisense oligonucleotide (ISIS 5476).
XX
XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /note= "phosphorothioate backbone"
XX
XX US442049-A.
XX
XX 15-AUG-1995.
XX
XX 25-JAN-1993; 93US-00009263.
XX
XX 19-NOV-1992; 92US-00927506.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker B, Draper K, Anderson K;
XX
XX WPI; 1995-292538/38.
XX
XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
PT treatment of CMV diseases.
XX
XX Example 10; Col 17; 66pp; English.
XX
XX AAT11971-84 are antisense oligonucleotides (ONs) against human
CC cytomegalovirus (CMV) that displayed activities of at least 50 % of
CC control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
CC mismatches could be tolerated without loss of antiviral activity.
CC Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA
CC polymerase proteins have been shown to be effective in therapy,
CC prophylaxis and diagnosis of CMV infection. The ONs may be modified to
CC reduce nuclease resistance and to increase their efficacy. Modifications
CC include phosphorothioate backbones, alkyl and halogen-substituted sugar
CC moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF
CC field.)
XX
XX Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 131 GGATGAAGACATCAACG 149
DB 20 GCAAGAGACAGGCAACG 2

RESULT 942
AAQ84817
ID AAQ84817 standard; DNA; 20 BP.
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XX AC AAQ84817;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 25-SEP-1995 (first entry)
XX XX
XX DE Spino cerebellar ataxia type 1 (SCA 1) PCR primer 9-1 (2919-2900).
XX XX
XX KW Spino cerebellar ataxia type 1; SCA 1; presymptomatic diagnosis;
XX KW PCR primer 9-1 (2919-2900); ss.
XX XX
XX OS Synthetic.
XX XX
XX PN WO9501437-A2.
XX XX
XX PD 12-JAN-1995.
XX PF 29-JUN-1994; 94WO-US007336.
XX PR 29-JUN-1993; 93US-00084365.
XX PR 28-JUN-1994; 94US-00267803.
XX XX
XX PA (MINU ) UNIV MINNESOTA.
XX XX
XX PI Orr HT, Chung M, Zoghbi HY;
XX XX
XX DR WPI; 1995-061001/08.
XX XX
XX PT New autosomal dominant spinocerebellar ataxia type 1 nucleic acid - used
XX PT to develop prods. for detection or presymptomatic diagnosis of a SCA1
XX PT disorder.
XX XX
XX PS Example II; Page 72; 11pp; English.
XX XX
XX CC AAQ84817 and AAQ84818 are a pair of primers for the PCR amplification of
XX CC AAQ84793, a new autosomal dominant spinocerebellar ataxia type 1 (SCA 1)
XX CC nucleic acid, which encodes the protein product described in AAR71111.
XX CC Both the nucleic acid and the protein can be used to develop products.
XX CC for the presymptomatic detection of a SCA 1 disorder. (Updated on 25-MAR-
XX CC 2003 to correct PN field.)
XX XX
XX SQ Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 40 GCAGGAGGACGACGAGTGT 58
Db 2 GCAGGATGACGACGCTGT 20

RESULT 943
AAQ01674/c
ID AAQ01674 standard; DNA; 20 BP.
XX AC AAQ01674;
XX DT 17-DEC-1995 (first entry)
XX XX
XX DE Peptide nucleic acid targeting CMV IE2 nuc sig 2.
XX KW peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
XX KW antiviral; diagnostic; ss.
XX OS Synthetic.
XX XX
XX PH Key Location/Qualifiers
XX FT misc_feature 1..20
XX FT /tag= a
XX FT /note= "at least one (and preferably all) of the backbone
XX FT subunits are composed of amide units, so that the
XX FT oligomer consists of the nucleobases attached covalently

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FT XX
XX PN WO9504748-A1.
XX XX
XX PD 16-FEB-1995.
XX XX
XX PF 09-AUG-1994; 94WO-US009039.
XX PR 09-AUG-1993; 93US-00104438.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsett LM;
XX DR WPI; 1995-090841/12.
XX XX
XX PT New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
XX PT papilloma:virus - are stable anti:sense molecules with high affinity for
XX PT single stranded DNA, used for treating infections.
XX XX
XX PS Claim 2; Page 44; 65pp; English.
XX XX
XX CC New oligomers are claimed which (A) have at least one peptide nucleic
XX CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5',
XX CC untranslated region, intron/exon (I/E) junction or coding sequence of
XX CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
XX CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
XX CC papillomavirus. The PNAs can be used to target RNA and single stranded
XX CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence
XX CC they may be used therapeutically for modulating cytomegalovirus and
XX CC papillomavirus processes and also as diagnostics (e.g., as probes for
XX CC specific mRNAs). PNA oligomers have high affinity for complementary
XX CC single stranded DNA. They are also able to form triple helices in which a
XX CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds
XX CC with the resulting double helix or with the first PNA strand. The PNAs
XX CC possess no significant charge and are water soluble, which facilitates
XX CC cellular uptake. Further, since they contain amides of non-biological
XX CC amino acids, they are biostable and resistant to enzymatic degradation by
XX CC proteases. The present sequence targets CMV IE2 nuclear localisation
XX CC signal 2
XX XX
XX SQ Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 131 GGATGAAGAAGATCAAAACG 149
Db 20 GCAAGAAGAAGAGCAAAACG 2

RESULT 944
AAQ94391
ID AAQ94391 standard; DNA; 20 BP.
XX AC AAQ94391;
XX DT 04-JUN-1996 (first entry)
XX XX
XX DE 5.8S ribosomal RNA gene ITS primer ITS2.
XX KW Plant pathogen; fungus; Septoria nodorum; Septoria tritici; Fusarium;
XX KW Pseudocercospora herpotrichoides; Mycosphaerella filijensis; PCS;
XX KW Mycosphaerella musicola; amplification; primer; ribosomal RNA gene;
XX KW internal transcribed region; strain; capture; colourimetric assay;
XX KW isolate; development; population; ss.
XX OS Synthetic.
XX XX
XX PN WO9529260-A2.
XX XX
XX PD 02-NOV-1995.

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to a polyamide backbone"


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XX PF 19-APR-1995; 95WO-US004712.
XX PR 25-APR-1994; 94US-00233608.
XX PA (CIBA ) CIBA GEIGY AG.
XX PI Ligon JM, Beck JJ;
XX WPI; 1995-383005/49.
XX DR
XX DNA encoding intervening transcribed sequence - used for detection of
XX plant fungal pathogens.
XX PS Claim 5; Page 15; 65pp; English.
XX CC A novel method for the detection of plant pathogenic strains of fungi
XX e.g. Septoria nodorum, S.tritici, Pseudocercospora herpotrichoides,
XX Mycosphaerella fijiensis, M.musicola or Fusarium spp, involves the PCR
XX amplification of sequences found in the internal transcribed region (ITS)
XX of the 18S, 5.8S and 28S ribosomal RNA genes by the primers AAQ94359-93
XX and AA705357-72. These primers are derived from the ITS sequences of
XX these fungi (AA705357-72 and AAQ94398) and are strain specific. The
XX amplification products of the reactions using these primers can be used
XX with the capture primers AA705378-93 in colourimetric assays. The primers
XX and ITS DNAs can be used for the detection of specific fungal pathogen
XX isolates and in monitoring disease development in plant populations
XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
Db 2 CTGCGTTCTTCATCGATGC 20

RESULT 945
AAQ94392/c
ID AAQ94392 standard; DNA; 20 BP.
XX AC AAQ94392;
XX AC AAQ94392;
XX DT 04-JUN-1996 (first entry)
XX DE 5.8S ribosomal RNA gene ITS primer ITS3.
XX KW Plant pathogen; fungus; Septoria nodorum; Septoria tritici; Fusarium;
XX KW Pseudocercospora herpotrichoides; Mycosphaerella fijiensis; PCR;
XX KW Mycosphaerella musicola; amplification; primer; ribosomal RNA gene;
XX KW internal transcribed region; strain; capture; colourimetric assay;
XX KW isolate; development; population; ss.
XX OS Synthetic.
XX OS WO9529260-A2.
XX PN WO9529260-A2.
XX PD 02-NOV-1995.
XX PF 19-APR-1995; 95WO-US004712.
XX PR 25-APR-1994; 94US-00233608.
XX PA (CIBA ) CIBA GEIGY AG.
XX PI Ligon JM, Beck JJ;
XX WPI; 1995-383005/49.
XX DNA encoding intervening transcribed sequence - used for detection of
XX plant fungal pathogens.

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XX PS Claim 5; Page 15; 65pp; English.
XX CC A novel method for the detection of plant pathogenic strains of fungi
XX e.g. Septoria nodorum, S.tritici, Pseudocercospora herpotrichoides,
XX Mycosphaerella fijiensis, M.musicola or Fusarium spp, involves the PCR
XX amplification of sequences found in the internal transcribed region (ITS)
XX of the 18S, 5.8S and 28S ribosomal RNA genes by the primers AAQ94359-93
XX and AA705357-72. These primers are derived from the ITS sequences of
XX these fungi (AA705357-72 and AAQ94398) and are strain specific. The
XX amplification products of the reactions using these primers can be used
XX with the capture primers AA705378-93 in colourimetric assays. The primers
XX and ITS DNAs can be used for the detection of specific fungal pathogen
XX isolates and in monitoring disease development in plant populations
XX SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
Db 19 CTGCGTTCTTCATCGATGC 1

RESULT 946
AAQ91602/c
ID AAQ91602 standard; DNA; 20 BP.
XX AC AAQ91602;
XX AC AAQ91602;
XX DT 05-FEB-1996 (first entry)
XX DE Candida spp. internally transcribed spacer 3 (ITS3) primer.
XX KW Internally transcribed spacer 3; ITS3; systemic candidiasis; detection;
XX KW diagnosis; universal primer; ss.
XX OS Synthetic.
XX OS US5426027-A.
XX PN US5426027-A.
XX PD 20-JUN-1995.
XX PF 20-MAY-1993; 93US-00065845.
XX PR 20-MAY-1993; 93US-00065845.
XX PA (USGO ) US GOVERNMENT.
XX PI Zakroff S, Lasker B, Lott TU, Morrison CU, Reiss E;
XX WPI; 1995-230900/30.
XX PT New isolated Candida nucleic acid sequences - used for detection of
XX PT Candida species, partic. for diagnosing systemic candidiasis.
XX PS Example 1; Col 6; 10pp; English.
XX CC AAQ91602 is an universal primer for the Candida spp. internally
XX CC transcribed spacer 2 (ITS2). The ITS can be used for the detection of
XX CC Candida spp., partic. for the diagnosis of systemic candidiasis
XX SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
Db 19 CTGCGTTCTTCATCGATGC 1

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RESULT 947
AAQ91604
ID AAQ91604 standard; DNA; 20 BP.
XX AC AAQ91604;
XX DT 05-FEB-1996 (first entry)
XX DE Candida spp. internally transcribed spacer 2 (ITS2) primer.
XX KW Internally transcribed spacer 2; ITS2; systemic candidiasis; detection;
XX KW diagnosis; universal primer; ss.
XX OS Synthetic.
XX PN US5426027-A.
XX PD 20-JUN-1995.
XX PF 20-MAY-1993; 93US-00065845.
XX PR 20-MAY-1993; 93US-00065845.
XX PA (USGO ) US GOVERNMENT.
XX PI Zakroff S, Lasker B, Lott TJ, Morrison CJ, Reiss E;
XX WPI; 1995-230900/30.
XX PT New isolated Candida nucleic acid sequences - used for detection of
XX PT Candida species, partic. for diagnosing systemic candidiasis.
XX PS Example 2; Col 15-16; 10pp; English.
XX CC AAQ91604 is an universal primer for the Candida spp. internally
XX CC transcribed spacer 4 (ITS4). The ITS can be used for the detection of
XX CC Candida spp., partic. for the diagnosis of systemic candidiasis
XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTGCGTCTTCGTCGATGC 1567
Db 2 CTGCGTCTTCATCGATGC 20
RESULT 948
AAT03667
ID AAT03667 standard; DNA; 20 BP.
XX AC AAT03667;
XX DT 19-JUL-1996 (first entry)
XX DE Hepatitis C diagnostic oligonucleotide MR2.
XX KW Diagnosis; hepatitis C virus; HCV; primer; amplify; detection;
XX KW hypervariable region; ss.
XX OS Synthetic.
XX PN JP07322881-A.
XX PD 12-DEC-1995.
XX PF 31-MAY-1994; 94JP-00142564.
XX PR 31-MAY-1994; 94JP-00142564.

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XX (SRLS-) SRL KK.
XX WPI; 1996-064846/07.
XX Oligo:nucleotide primers for amplifying hepatitis C virus cDNA -
XX PT specifically the hyper:variable regions, useful for diagnosis of
XX PT hepatitis C.
XX PS Claim 4; Page 2; 27pp; Japanese.
XX CC The sequences given in AAT03664-73 are oligonucleotides which are used in
XX CC the diagnosis of hepatitis C virus (HCV). These oligonucleotides acts as
XX CC primers to amplify region of the HCV genome, pref. hypervariable regions.
XX CC The amplified product is subjected to electrophoresis under denaturing
XX CC conditions. Preferably, primer MS1, MS2, MS3, MS4, MS5 or MS6 and an
XX CC oligo selected from MR1, MR2 or MR1' are used as primer pairs
XX SQ Sequence 20 BP; 2 A; 6 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 916 CTGTTCTCTTCAGCTGC 934
Db 1 CTGTTGATGTGCCAGCTGC 19
RESULT 949
AAT47929
ID AAT47929 standard; DNA; 20 BP.
XX AC AAT47929;
XX DT 18-JUN-1997 (first entry)
XX DE Primer for N-terminal L-proline-4-hydroxylase coding sequence.
XX KW L-proline-4-hydroxylase; convert; catalyse; L-proline; production;
XX KW trans-4-hydroxy-L-proline; 2-ketoglutaric acid; ferrous ion;
XX KW industrial scale; intermediate; manufacture; drug; food additive; primer;
XX KW PCR; polymerase chain reaction; ss.
XX OS Synthetic.
XX PN WO9627669-A1.
XX PD 12-SEP-1996.
XX PF 07-MAR-1996; 96WO-JP000559.
XX PR 07-MAR-1995; 95JP-00045988.
XX PA (KYOW ) KYOWA HAKKO KOGYO KK.
XX PI Ozaki A, Mori H, Shibasaki T;
XX WPI; 1996-425429/42.
XX DE DNA coding for L-proline-4-hydroxylase of microbial origin - for large
XX PT scale production of trans-4-hydroxy-L-proline, useful as an intermediate
XX PT in drug synthesis or as a food additive.
XX PS Example 1; Page 51; 83pp; Japanese.
XX CC AAT47929-30 are primers used to amplify the sequence encoding the N-
XX CC terminal of L-proline-4-hydroxylase (WO9291) from Dactylosporangium sp.
XX CC The enzyme converts L-proline to trans-4-hydroxy-L-proline in the
XX CC presence of 2-ketoglutaric acid and ferrous ions. The DNA (AAT47924) is
XX CC used for the efficient production of trans-4-hydroxy-L-proline on an
XX CC industrial scale for use as an intermediate in the manufacture of drugs
XX CC and as a food additive

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RESULT 951

KW Primer; internal transcribed spacer 2; ITS2; diagnosis; PCR;
 KW amplification; polymerase chain reaction; systemic candidiasis; ss.
 XX
 OS Synthetic.
 XX
 PN US5645992-A.
 XX
 XX 08-JUL-1997.
 XX
 XX 26-APR-1995; 95US-00429522.
 XX
 XX 20-MAY-1993; 93US-00065845.
 XX
 XX (USSH) US DEPT HEALTH & HUMAN SERVICES.
 PA
 XX Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;
 PI
 XX WPI; 1997-362923/33.
 DR
 XX Candida tropicalis internal transcribed spacer 2 - and probes that
 PT hybridise to it, useful for highly sensitive diagnosis of systemic
 PT candidiasis.
 XX
 XX Example 1; Col 13-14; 10pp; English.
 PS
 XX The present sequence is a primer for the PCR amplification of the Candida
 CC internal transcribed spacer 2 (ITS2), which can be used in the diagnosis
 CC systemic candidiasis. (Updated on 25-MAR-2003 to correct PF field.)
 XX
 XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCGGTCTTCGTCGATGC 1567
 Db 19 CTGCGTTCTTCATCGATGC 1
 RESULT 953
 AAT84762
 ID AAT84762 standard; DNA; 20 BP.
 XX
 AC AAT84762;
 XX
 XX 25-MAR-2003 (revised)
 DT 04-NOV-1997 (first entry)
 XX
 XX Primer ITS4 for Candida internal transcribed spacer 4.
 DE
 XX Primer; internal transcribed spacer 4; ITS4; diagnosis; PCR;
 KW amplification; polymerase chain reaction; systemic candidiasis; ss.
 XX
 OS Synthetic.
 XX
 XX US5645992-A.
 PN
 XX 08-JUL-1997.
 PD
 XX 26-APR-1995; 95US-00429522.
 PF
 XX 20-MAY-1993; 93US-00065845.
 PR
 XX (USSH) US DEPT HEALTH & HUMAN SERVICES.
 PA
 XX Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;
 PI
 XX WPI; 1997-362923/33.
 DR
 XX Candida tropicalis internal transcribed spacer 2 - and probes that
 PT hybridise to it, useful for highly sensitive diagnosis of systemic
 PT candidiasis.

XX Example 1; Col 13-14; 10pp; English.
 PS
 XX The present sequence is a primer for the PCR amplification of the Candida
 CC internal transcribed spacer 4 (ITS4), which can be used in the diagnosis
 CC systemic candidiasis. (Updated on 25-MAR-2003 to correct PF field.)
 XX
 XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCGGTCTTCGTCGATGC 1567
 Db 2 CTGCGTTCTTCATCGATGC 20
 RESULT 954
 AAT75521/c
 ID AAT75521 standard; DNA; 20 BP.
 XX
 AC AAT75521;
 XX
 XX 25-MAR-2003 (revised)
 DT 24-SEP-1997 (first entry)
 XX
 XX Candida universal internal transcribed spacer primer, ITS2.
 DE
 XX Internal transcribed spacer; ITS; detection; probe; diagnosis;
 KW systemic infection; candidiasis; primer; PCR; amplification;
 KW polymerase chain reaction; ss.
 XX
 OS Synthetic.
 XX
 XX US5635353-A.
 PN
 XX 03-JUN-1997.
 PD
 XX 26-APR-1995; 95US-00429532.
 PF
 XX 20-MAY-1993; 93US-00065845.
 PR
 XX (USSH) US DEPT HEALTH & HUMAN SERVICES.
 PA
 XX Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;
 PI
 XX WPI; 1997-309822/28.
 DR
 XX Isolated nucleic acid specific for internal transcribed spacer of Candida
 PT krusei - can be detected by specific probe for rapid and sensitive
 PT diagnosis of systemic candidiasis.
 XX
 XX Example 2; Col 13-14; 10pp; English.
 PS
 XX The present sequence is an universal Candida internal transcribed spacer
 CC (ITS) primer for the detection of ITS, useful to diagnose systemic
 CC Candida infection, i.e. candidiasis. (Updated on 25-MAR-2003 to correct
 CC PF field.)
 XX
 XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCGGTCTTCGTCGATGC 1567
 Db 19 CTGCGTTCTTCATCGATGC 1
 RESULT 955
 AAT75523

```
ID AAT75523 standard; DNA; 20 BP.
XX AC
XX AAT75523;
XX DT
XX 25-MAR-2003 (revised)
XX 24-SEP-1997 (first entry)
XX DE
XX Candida universal internal transcribed spacer primer, ITS4.
XX KW
XX Internal transcribed spacer; ITS; detection; probe; diagnosis;
XX KW systemic infection; candidiasis; primer; PCR; amplification;
XX KW polymerase chain reaction; ss.
XX OS
XX Synthetic.
XX PN
XX US5635353-A.
XX PD
XX 03-JUN-1997.
XX PF
XX 26-APR-1995; 95US-00429532.
XX PR
XX 20-MAY-1993; 93US-00065845.
XX PA
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX PI
XX Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;
XX DR
XX WPI; 1997-309822/28.
XX PT
XX Isolated nucleic acid specific for internal transcribed spacer of Candida
XX PT krusei - can be detected by specific probe for rapid and sensitive
XX PT diagnosis of systemic candidiasis.
XX XX
XX Example 2; Col 13-14; 10pp; English.
XX CC
XX The present sequence is an universal Candida internal transcribed spacer
XX CC (ITS) primer for the detection of ITS, useful to diagnose systemic
XX CC Candida infection, i.e. candidiasis. (Updated on 25-MAR-2003 to correct
XX CC PF field.)
XX SQ
XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 1549 CTTCGCTTCTTCGATGC 1567
Db ||||| ||||| |||||
2 CTGCGTTCATCATCATGC 20
RESULT 956
AAT68379/c
ID AAT68379 standard; DNA; 20 BP.
XX AC
XX AAT68379;
XX DT
XX 11-AUG-1997 (first entry)
XX DE
XX Loci-specific primer for assessing integrity of human Y chromosome.
XX KW
XX Y chromosome; integrity; chromosome locus; primer; amplification; PCR;
XX KW polymerase chain reaction; fertility; azoospermia; oligospermia;
XX KW infertile; diagnosis; DYS209; DYS210; DYS211; DYS212; DYS213; SMCX;
XX KW DAZ(1); DYS218; DYS219; DYS220; DYS221; DYS222; DYS223; DYS224;
XX KW DYS241; DYS198; SRY; DYS197; DYS196; DYS240; DYS271; DYS221; KAL182;
XX KW DAZ(2); DYS224; DYS226; DYS227; DYS229; DYS230; DAZ(3);
XX KW DAZ(4); DAZ(5); SMCY; DYS217; DYS220; DYS223; DYS7; DYS215; DYS7;
XX KW DYS237; DAZ(6); DAZ(7); DAZ(8); DAZ(9); DAZ(10); DAZ(11); YRRM1; ZFY;
XX KW BKM; ss.
XX OS
XX Homo sapiens.
XX XX
```

```
PN WO9641007-A1.
XX 19-DEC-1996.
XX PF
XX 06-JUN-1996; 96WO-US009421.
XX PR
XX 07-JUN-1995; 95US-00472416.
XX 18-SEP-1995; 95US-00531556.
XX (PROM-) PROMEGA CORP.
XX First MK, Agoulnik AI, Muallem A;
XX WPI; 1997-099942/09.
XX Assessing integrity of Y chromosome - by amplification of selected human
XX chromosome loci by multiplex PCR and comparison with normal control DNA.
XX Claim 2; Page 73; 111pp; English.
XX CC
XX AAT68369-T68381 and AAT70842 are a set of primers used in a method for
XX assessing the integrity of a Y chromosome. The primers are capable of
XX priming the chromosome loci: SMCY, DYS217, DYS220, DYS223, DYS7, DYS237,
XX DYS215, MIC2 and DAZ(6) and MIC2. The method can be used to rapidly and
XX reproducibly assess the integrity of specific regions of the Y chromosome
XX that are associated with male fertility. It can be used to assess the
XX integrity of the Y chromosome in males exhibiting azoospermia or
XX oligospermia (no or very little spermatozoa in the semen) or to assess
XX the genotype of infants of phenotypically ambiguous sexuality. The method
XX can also be used in diagnosis and quality control
XX Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 1483 CACAAACTTCTGACACTA 1501
Db ||||| ||||| |||||
19 CAAAACCTTCTGAGACCA 1
RESULT 957
ADG78073/c
ID ADG78073 standard; DNA; 20 BP.
XX AC
XX ADG78073;
XX DT
XX 11-MAR-2004 (first entry)
XX DE
XX Canine disease marker-related PCR primer 917.
XX KW
XX genetic disease; genetic trait; dog; carrier of recessive disease;
XX KW copper toxicosis; CT; canine genome map; breed-specific profile;
XX KW DNA fingerprint; dog identification; PCR; primer; ss.
XX OS
XX Canis familiaris.
XX PN
XX WO9731011-A1.
XX PD
XX 28-AUG-1997.
XX PF
XX 18-FEB-1997; 97WO-US002396.
XX PR
XX 22-FEB-1996; 96US-0012060P.
XX (UNMI ) UNIV MICHIGAN.
XX PA (UNMS ) UNIV MICHIGAN STATE.
XX Brewer GJ, Venta PJ, Yuzbasiyan-Gurkan V;
XX WPI; 1997-435082/40.
XX DR
XX XX
```

PT New oligonucleotide primers for diagnosis of genetic diseases and traits
PT in dogs - amplify specific regions of the genome containing
PT microsatellite repeats, especially for diagnosing copper toxicosis and
PT carriers.
XX
XX Claim 1; Page 19; 40pp; English.
XX
XX This invention relates to novel oligonucleotide PCR primers which may be
XX used to identify markers associated with genetic diseases and traits in
XX dogs, in particular to diagnose genetic diseases that are not
XX phenotypically visible and to identify carriers of recessive diseases. A
XX specific application is diagnosis of copper toxicosis (CT). The invention
XX can also be used to create a genetic map of the canine genome; to
XX generate breed-specific profiles; to establish paternity and to identify
XX dogs from DNA fingerprints. The method provides rapid analysis of the
XX target sequences from only a small sample of DNA. Diagnosis can be done
XX at any time in the dog's life. The present sequence is that of a PCR
XX primer of the invention.
XX
XX Sequence 20 BP; 1 A; 8 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 663 CAAAGGCAAAAGCAAGCTC 681
Db |||||
19 CAGAGGCAAGCAGGCTC 1

RESULT 958
ADG77630
ID ADG77630 standard; DNA; 20 BP.
XX AC ADG77630;
XX
XX 11-MAR-2004 (first entry)
XX
XX Canine disease marker-related PCR primer 474.
XX
XX genetic disease; genetic trait; dog; carrier of recessive disease;
XX copper toxicosis; CT; canine genome map; breed-specific profile;
XX DNA fingerprint; dog identification; PCR; primer; ss.
XX
XX Canis familiaris.
XX
XX WO9731011-A1.
XX
XX 28-AUG-1997.
XX
XX 18-FEB-1997; 97WO-US002396.
XX
XX 22-FEB-1996; 96US-0012060P.
XX
XX (UNMI) UNIV MICHIGAN.
XX (UNMS) UNIV MICHIGAN STATE.
XX
XX Brewer GJ, Venta PJ, Yuzbasiyan-Gurkan V;
XX
XX WPI; 1997-435082/40.
XX
XX New oligonucleotide primers for diagnosis of genetic diseases and traits
XX in dogs - amplify specific regions of the genome containing
XX microsatellite repeats, especially for diagnosing copper toxicosis and
XX carriers.
XX
XX Claim 1; Page 15; 40pp; English.
XX
XX This invention relates to novel oligonucleotide PCR primers which may be
XX used to identify markers associated with genetic diseases and traits in
XX dogs, in particular to diagnose genetic diseases that are not
XX phenotypically visible and to identify carriers of recessive diseases. A
XX specific application is diagnosis of copper toxicosis (CT). The invention

CC can also be used to create a genetic map of the canine genome; to
CC generate breed-specific profiles; to establish paternity and to identify
CC dogs from DNA fingerprints. The method provides rapid analysis of the
CC target sequences from only a small sample of DNA. Diagnosis can be done
CC at any time in the dog's life. The present sequence is that of a PCR
CC primer of the invention.
XX
XX Sequence 20 BP; 0 A; 9 C; 3 G; 8 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 826 TCCTCACCCTGTCTTGTG 844

Db 2 TCCTCTGCTGTCTCTCTG 20

RESULT 959

AAV62540/C
ID AAV62540 standard; DNA; 20 BP.

XX AC AAV62540;

XX 17-DEC-1998 (first entry)

XX Ribosomal gene 5.8S rDNA specific primer ITS3.

XX Internal transcribed spacer; ITS; ribosomal RNA; Fusarium avenaceum;
KW Fusarium culmorum; Fusarium graminearum; Fusarium moniliforme; plant;
KW Septoria avenae; Microdochium nivale; Fusarium poae; fungal pathogen;
KW PCR; nucleic acid detection; PCR primer; ss.

XX Synthetic.

XX Fusarium sp.

XX US5814453-A.

XX 29-SEP-1998.

XX 02-JUL-1997; 97US-00887480.

XX 19-APR-1995; 95WO-US004712.

XX 15-OCT-1996; 96US-00722187.

XX (NOVS) NOVARTIS FINANCE CORP.

XX Beck JJ;

XX WPI; 1998-541745/46.

XX DNA isolated from fungal RNA, and its internal transcribed spacer
XX sequence - used for detecting fungal pathogens in plant tissue.

XX Example 6; Col 17; 56pp; English.

XX Sequences AAV62507 to AAV62566 represent species specific PCR primers for
XX various fungal isolates used for fungal detection in the course of the
XX invention. The primers are designed based on the internal transcribed
XX spacer (ITS) sequences of the various fungal species. The invention
XX provides a DNA molecule isolated from the ribosomal RNA gene region of a
XX fungal pathogen, where the DNA molecule consists of an ITS sequence
XX selected from ITS1 and ITS2 of Fusarium culmorum, Fusarium graminearum,
XX Fusarium moniliforme, Septoria avenae or Microdochium nivale. A method
XX for detecting F. graminearum, F. culmorum, F. moniliforme, F. poae, F.
XX avenaceum and M. nivale isolates is also provided which comprises
XX isolating DNA from a plant leaf infected with at least one of the above
XX pathogens and amplifying parts of the ITS sequence of the pathogen(s) by
XX PCR using specific primers from within these sequences. The pathogen(s)
XX are detected by visualising the amplified part of the ITS sequence
XX
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

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Query Match      0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
Db 19 CTGCGTTCTTCATCGATGC 1

RESULT 960
AAV62539
ID AAV62539 standard; DNA; 20 BP.
XX
AC AAV62539;
XX
DT 17-DEC-1998 (first entry)
XX
DE Ribosomal gene 5.8S rDNA specific primer ITS2.
XX
KW Internal transcribed spacer; ITS; ribosomal RNA; Fusarium avenaceum;
KW Fusarium culmorum; Fusarium graminearum; Fusarium moniliforme; plant;
KW Septoria avenae; Microdochium nivale; Fusarium poae; fungal pathogen;
KW PCR; nucleic acid detection; PCR primer; ss.
XX
OS Synthetic.
OS Fusarium sp.
XX
PN US5814453-A.
XX
PD 29-SEP-1998.
XX
PF 02-JUL-1997; 97US-00887480.
XX
PR 19-APR-1995; 95WO-US004712.
PR 15-OCT-1996; 96US-00722187.
XX
PA (NOVS ) NOVARTIS FINANCE CORP.
XX
PI Beck JU;
XX
DR WPI; 1998-541745/46.
XX
DNA isolated from fungal RNA, and its internal transcribed spacer
sequence - used for detecting fungal pathogens in plant tissue.
XX
Example 6; Col 17; 56pp; English.
XX
Sequences AAV62507 to AAV62566 represent species specific PCR primers for
various fungal isolates used for fungal detection in the course of the
invention. The primers are designed based on the internal transcribed
spacer (ITS) sequences of the various fungal species. The invention
provides a DNA molecule isolated from the ribosomal RNA gene region of a
fungal pathogen, where the DNA molecule consists of an ITS sequence
selected from ITS1 and ITS2 of Fusarium culmorum, Fusarium graminearum,
Fusarium moniliforme, Septoria avenae or Microdochium nivale. A method
for detecting F. graminearum, F. culmorum, F. moniliforme, F. poae, F.
avenaceum and M. nivale isolates is also provided which comprises
isolating DNA from a plant leaf infected with at least one of the above
pathogens and amplifying parts of the ITS sequence of the pathogen(s) by
PCR using specific primers from within these sequences. The pathogen(s)
are detected by visualising the amplified part of the ITS sequence
XX
Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match      0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
Db 2 CTGCGTTCTTCATCGATGC 20

RESULT 961
AAV59027/c
ID AAV59027 standard; DNA; 20 BP.
XX
AC AAV59027;
XX
DT 25-MAR-2003 (revised)
DT 06-JAN-1999 (first entry)
XX
DE Internal transcribed spacer primer ITS3.
XX
KW Internal transcribed spacer; ITS; Microdochium; Fusarium; wheat pathogen;
KW fungal pathogen identification; infection identification; PCR primer; ss.
XX
OS Synthetic.
OS Fusarium sp.
XX
PN US5827695-A.
XX
PD 27-OCT-1998.
XX
PF 04-AUG-1997; 97US-00905314.
XX
PR 04-AUG-1997; 97US-00905314.
XX
PA (NOVS ) NOVARTIS FINANCE CORP.
XX
PI Beck JU;
XX
DR WPI; 1998-593995/50.
XX
Wheat pathogen internal transcribed spacer sequences - used as a basis
for primers for the species-specific polymerase chain reaction detection
of the pathogens.
XX
Example 5; Col 10; 20pp; English.
XX
This sequence represents a primer based on an internal transcribed spacer
(ITS) sequence of the invention. Primer pairs, based on the ITS
sequences, are used for the PCR amplification detection of wheat
Microdochium and Fusarium fungal pathogens, especially M. nivale, F.
graminearum, F. culmorum, F. avenaceum, F. poae, F. moniliforme or F.
roseum. The two different strains of fungi show different symptoms during
infection, which may or may not be due to infection. Early identification
of the strain causing the infection allows early, and more specific
fungicidal treatment. (Updated on 25-MAR-2003 to correct PF field.)
XX
Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match      0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
Db 19 CTGCGTTCTTCATCGATGC 1

RESULT 962
AAV59024
ID AAV59024 standard; DNA; 20 BP.
XX
AC AAV59024;
XX
DT 25-MAR-2003 (revised)
DT 06-JAN-1999 (first entry)
XX
DE Internal transcribed spacer primer ITS28.
XX
KW Internal transcribed spacer; ITS; Microdochium; Fusarium; wheat pathogen;
KW fungal pathogen identification; infection identification; PCR primer; ss.
XX

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SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
  Query Match      0.8%; Score 14.2; DB 1; Length 20;
  Best Local Similarity 84.2%; Pred. No. 8.7e+02;
  Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
  ||| ||| ||| ||| ||| ||| |||
Db 2 CTGCGTCTTCATCGATGC 20

RESULT 965
AAV11551
ID AAV11551 standard; cDNA; 20 BP.
XX
AC AAV11551;
XX
DT 14-SEP-1998 (first entry)
DE
DE Human lipid metabolic pathway h-LMP-1 gene PCR primer.
XX
XX Lipid metabolic pathway; h-LMP-1 gene; cardiovascular disease;
KW atherosclerosis; biliary tract disorder; gall stone; therapy; diagnosis;
KW human; PCR; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9809979-A1.
XX
PD 12-MAR-1998.
XX
PF 28-AUG-1997; 97WO-US015195.
XX
PR 04-SEP-1996; 96US-00707399.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Gimeno CJ, Acton S;
XX
DR WPI; 1998-193545/17.
XX
XX DNA encoding lipid metabolic pathway polypeptide(s) - useful for
PT treatment of cardiovascular disease or modulation of lipid uptake or
PT metabolism.
XX
PS Disclosure; Page 85; 102pp; English.
XX
CC This PCR primer anneals to bases 371-390 of a human lipid metabolic
CC pathway h-LMP-1 cDNA clone (see AAV11548) isolated from human breast
CC cDNA. It can be used in PCR reactions to clone LMP homologues in other
CC cell types, e.g. from other tissues and from other mammalian organisms.
CC LMP nucleic acids and polypeptides (see AAV5888) are useful for
CC developing methods for treatment of cardiovascular diseases or for
CC modulating lipid uptake or metabolism, and in drug screening assays
XX
SQ Sequence 20 BP; 9 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
  Query Match      0.8%; Score 14.2; DB 1; Length 20;
  Best Local Similarity 84.2%; Pred. No. 8.7e+02;
  Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 864 GAAGCAGTACCTGGATGAC 882
  ||| ||| ||| ||| ||| ||| |||
Db 2 GAAGAGAACCCAGGATGAC 20

RESULT 966
AAV42503/c
ID AAV42503 standard; DNA; 20 BP.
XX
AC AAV42503;
XX

SQ Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
  Query Match      0.8%; Score 14.2; DB 1; Length 20;
  Best Local Similarity 84.2%; Pred. No. 8.7e+02;
  Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1483 CACAAACTTCTCTGACACTA 1501
  ||| ||| ||| ||| ||| ||| |||
Db 19 CAAAAACTTCTCTGACACCA 1

RESULT 967
AAV22643/c
ID AAV22643 standard; DNA; 20 BP.
XX
AC AAV22643;
XX
DT 10-JUL-1998 (first entry)
DE
DE PCR primer specific for Phytophthora infestans sequences.
XX
KW Phytophthora; potato; late-blight; P. infestans; P. erythroseptica;
KW P. nicotianae; pink rot; detection; disease; PCR primer; ss.
XX
OS Synthetic.
OS Phytophthora infestans.
XX
PN WO9808862-A1.
XX
PD 05-MAR-1998.
XX
PF 28-AUG-1997; 97WO-US015143.

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DT 02-OCT-1998 (first entry)
DE
DE PCR primer 2 used to amplify human loci DYS7 DNA.
XX
XX Assay; Y chromosome; Y chromosome loci; human; male fertility; detection;
KW deletion mutation; male infertility; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9824937-A2.
XX
PD 11-JUN-1998.
XX
PF 04-DEC-1997; 97WO-US023136.
XX
PR 04-DEC-1996; 96US-00753979.
XX
PA (PROM-) PROMEGA CORP.
XX
PI First MK, Muallem A;
XX
DR WPI; 1998-333352/29.
XX
PT Assessing Y chromosome integrity in predicting human male infertility -
PT by amplifying specific regions of human Y chromosome linked to normal
PT fertility by multiplex PCR and detecting deletion mutations.
XX
PS Claim 2; Page 35; 47pp; English.
XX
CC PCR primers AAV42472-511 are used in a method for assessing the integrity
CC of a Y chromosome. Genomic DNA, or blood, from a subject is combined with
CC several distinct oligonucleotide primer pairs capable of simultaneously
CC priming several human Y chromosome loci which are linked to normal
CC fertility in human males. The present primer pair (AAV42502-03) amplify
CC loci DYS7. The primer pairs are amplified by multiplex PCR, yielding
CC amplified chromosomal DNA fragments which are isolated and compared with
CC those from normal male subjects. The method is useful to detect deletion
CC mutations on a Y chromosome which are predictive of human male
CC infertility
XX
SQ Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
  Query Match      0.8%; Score 14.2; DB 1; Length 20;
  Best Local Similarity 84.2%; Pred. No. 8.7e+02;
  Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1483 CACAAACTTCTCTGACACTA 1501
  ||| ||| ||| ||| ||| ||| |||
Db 19 CAAAAACTTCTCTGACACCA 1

RESULT 967
AAV22643/c
ID AAV22643 standard; DNA; 20 BP.
XX
AC AAV22643;
XX
DT 10-JUL-1998 (first entry)
DE
DE PCR primer specific for Phytophthora infestans sequences.
XX
KW Phytophthora; potato; late-blight; P. infestans; P. erythroseptica;
KW P. nicotianae; pink rot; detection; disease; PCR primer; ss.
XX
OS Synthetic.
OS Phytophthora infestans.
XX
PN WO9808862-A1.
XX
PD 05-MAR-1998.
XX
PF 28-AUG-1997; 97WO-US015143.

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XX 28-AUG-1996; 96US-00704207.
XX (USDA ) US SEC OF AGRIC.
XX Tooley P, Bunyard B, Carras M, Hatziloukas E;
XX WPI; 1998-179378/16.
XX Oligonucleotide primers for PCR detection of Phytophthora spp. - e.g. to
XX detect P. infestans, which causes potato light blight and distinguish
XX from P. erythroseptica and P. nicotianae, which cause pink rot.
XX Claim 2; Page 27; 40pp; English.
XX PCR primers AAV22642-46 are specific for Phytophthora species which
XX infect potatoes and cause diseases such as late-blight. PCR primers
XX AAV22642-43 amplify a 456 bp fragment from P. infestans, PCR primers
XX AAV22644-45 amplify a 136 bp fragment from P. erythroseptica, and PCR
XX primers AAV22643 and AAV22646 amplify a 455 bp fragment from P.
XX nicotianae. The primer sets are useful for detecting Phytophthora species
XX by PCR. Phytophthora species infecting potatoes may result in late blight
XX (caused by P. infestans) or in pink rot (caused by P. erythroseptica and
XX P. nicotianae), and the primers can detect these diseases and
XX differentiate between them
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTCGGTCTTCGCGATGC 1567
DB 19 CTGCGTCTTCATCGATGC 1
RESULT 968
AAV18199/c
ID AAV18199 standard; DNA; 20 BP.
XX AAV18199;
XX 28-AUG-1998 (first entry)
XX Primer for Fanconi anaemia of complementation group A gene.
XX Fanconi anaemia of complementation group A; FA-A; Genetic defect;
XX prenatal FA-A; FA-A carrier detection; disease diagnosis; PCR primer; ss.
XX Synthetic.
XX Homo sapiens.
XX WO9814462-A1.
XX 09-APR-1998.
XX 03-OCT-1997; 97WO-US018010.
XX 04-OCT-1996; 96US-00726012.
XX (FANCI-) FANCONI ANEMIA RES FUND INC.
XX Joenje H, Lo Ten Foe JR;
XX WPI; 1998-240012/21.
XX DNA for Fanconi Anaemia complementation group A - useful for, e.g.
XX developing products for diagnosis and screening of disease and gene
XX therapy.
XX Disclosure; Page 11; 63pp; English.
CC This sequence represents a PCR primer for the DNA encoding the Fanconi
CC anaemia of complementation group A (FA-A) protein of the invention. The
CC amplified DNA's may be used to complement a genetic defect in a cell
CC (especially the FA-A gene). The products can be used for screening
CC (especially prenatal FA-A), detection of FA-A carriers and FA-A disease
CC diagnosis
XX Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 259 GAGGCCCCACACGCTGCTG 277
DB 19 GAGTGCCCCACATGTGCTG 1
RESULT 969
AAV70045/c
ID AAV70045 standard; DNA; 20 BP.
XX AAV70045;
XX 04-FEB-1999 (first entry)
XX Rat c-Fos protein antisense oligonucleotide #99.
XX Rat; c-fos; c-jun; activating protein 1; AP-1; diagnosis; metastasis;
XX antisense oligonucleotide; phosphorothioate; regulation;
XX malignant tumour; cell cycle expression; hyperproliferative disease; ss.
XX Synthetic.
XX Rattus sp.
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /note= "phosphorothioate linkages"
XX WO9846272-A1.
XX 22-OCT-1998.
XX 14-APR-1998; 98WO-US007386.
XX 14-APR-1997; 97US-00837201.
XX (ISIS-) ISIS PHARM INC.
XX Dean NM, McKay R, Miraglia L, Baker B;
XX WPI; 1998-609906/51.
XX Antisense oligonucleotides regulating Activating Protein 1 subunits -
XX hybridise with c-fos and c-jun mRNA, used for regulating metastasis, cell
XX cycle expression and hyperproliferative disease.
XX Example 9; Page 57; 120pp; English.
XX AAV70042 to AAV70052 represent antisense oligonucleotides which are
XX specifically hybridisable with a region of a nucleic acid encoding rat c-
XX Fos protein. The antisense compound regulates the expression of the c-Fos
XX protein. The present invention also describes antisense oligonucleotides
XX which regulate the c-Jun protein. The antisense oligonucleotides are used
XX for the diagnosis and treatment of diseases or disorders associated with
XX Activating Protein 1 expression, of which c-fos and c-jun are subunits.
XX The antisense oligonucleotides are used in compositions as c-fos and/or c-
XX Jun together with a carrier and a chemotherapeutic agent. They are used
XX to regulate the expression of c-Fos or c-Jun in cells or tissues,
XX preferably by inhibiting metastasis. They also regulate cell cycle
XX expression and can be used to treat an animal with, or being prone to, a
XX hyperproliferative disease

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XX SQ Sequence 20 BP; 2 A; 2 C; 11 G; 5 T; 0 U; 0 Other;
      Query Match          0.8%; Score 14.2; DB 1; Length 20;
      Best Local Similarity 84.2%; Pred. No. 8.7e+02;
      Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1720 AGCCATGTTTCACCTGCCCA 1738
      ||||| ||||| |||||
Db 19 AGCCATCTCCACGACCCA 1

RESULT 970
AAV24006/c
ID AAV24006 standard; DNA; 20 BP.
XX
AC AAV24006;
XX
XX 27-AUG-2003 (revised)
DT 06-AUG-1998 (first entry)
XX
DE Primer ITS3 for Candida nucleic acid sequences.
XX
KW PCR primer; Candida detection; Aspergillus; systemic candidiasis; ss.
OS Synthetic.
OS Candida.
XX WO9811257-A1.
PN
XX
PD 19-MAR-1998.
XX
XX 15-SEP-1997; 97WO-US016423.
XX
PR 16-SEP-1996; 96US-0026387P.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
XX Morrison CJ, Reiss E, Holloway B, Shin JH;
XX WPI; 1998-216957/19.
XX
XX Probes for detection of Candida species - useful for diagnosis of
PT systemic candidiasis.
PT
XX
PS Example 1; Page 16; 55pp; English.
XX
XX This sequence represents a primer for Candida nucleic acid sequences. The
CC amplified sequences are recognised by the probes of the invention. The
CC probes can be used in the method of the invention for the detection of
CC Aspergillus sp. and Candida sp. in a sample. The probes can be used to
CC diagnose systemic candidiasis. (Updated on 27-AUG-2003 to correct OS
CC field.)
XX
XX SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
      Query Match          0.8%; Score 14.2; DB 1; Length 20;
      Best Local Similarity 84.2%; Pred. No. 8.7e+02;
      Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1549 CTTCGGTCTTCGTCGATGC 1567
      ||||| ||||| |||||
Db 19 CTGCGTCTTCATCGATGC 1

RESULT 971
AAV24009
ID AAV24009 standard; DNA; 20 BP.
XX
AC AAV24009;
XX
XX 27-AUG-2003 (revised)
DT 06-AUG-1998 (first entry)
XX

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XX DE Primer ITS2 for Candida nucleic acid sequences.
XX
KW PCR primer; Candida detection; Aspergillus; systemic candidiasis; ss.
XX
OS Synthetic.
OS Candida.
XX WO9811257-A1.
PN
XX
PD 19-MAR-1998.
XX
XX 15-SEP-1997; 97WO-US016423.
XX
PR 16-SEP-1996; 96US-0026387P.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
XX Morrison CJ, Reiss E, Holloway B, Shin JH;
XX WPI; 1998-216957/19.
XX
XX Probes for detection of Candida species - useful for diagnosis of
PT systemic candidiasis.
PT
XX
PS Example 2; Page 47; 55pp; English.
XX
XX This sequence represents a primer for Candida nucleic acid sequences. The
CC amplified sequences are recognised by the probes of the invention. The
CC probes can be used in the method of the invention for the detection of
CC Aspergillus sp. and Candida sp. in a sample. The probes can be used to
CC diagnose systemic candidiasis. (Updated on 27-AUG-2003 to correct OS
CC field.)
XX
XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
      Query Match          0.8%; Score 14.2; DB 1; Length 20;
      Best Local Similarity 84.2%; Pred. No. 8.7e+02;
      Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1549 CTTCGGTCTTCGTCGATGC 1567
      ||||| ||||| |||||
Db 2 CTGCGTCTTCATCGATGC 20

RESULT 972
AAT89974/c
ID AAT89974 standard; DNA; 20 BP.
XX
AC AAT89974;
XX
XX 20-MAR-1998 (first entry)
DT
XX
XX Candida albicans ITS2 rDNA PCR primer ITS3.
XX
XX ITS2 rDNA; systemic candidiasis; pathogen; diagnosis; PCR primer; ss.
XX
XX Synthetic.
OS Candida albicans.
XX
XX US5688644-A.
PN
XX
XX 18-NOV-1997.
XX
XX 26-APR-1995; 95US-00429520.
XX
XX 20-MAY-1993; 93US-00065845.
XX
XX (USGO ) US GOVERNMENT.
XX
XX Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;
XX WPI; 1998-007977/01.
XX

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Best Local Similarity 84.2%; Pred.No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCCGGTCTTCGTCGATGC 1567
 ||||| |
DB 2 CTGCCGTCTTCATCGATGC 20

RESULT 974
AAAX17950/c
XX AAAX17950 standard; DNA; 20 BP.
XX AC AAX17950;
XX DT 11-MAY-1999 (first entry)
XX DE Anti-CMV oligonucleotide #15104.

XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
KW cytomegalovirus; inhibition; replication; sugar modification;
KW phosphorothioate; infection; retinitis; ss.
XX Synthetic.
OS Human herpesvirus 5.
OS OS
XX XX Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /note= "contains phosphorothioate internucleotide linkages"
FT modified_base 1..20
FT /*tag= b
FT /note= "all C bases are 5'-methyl-cytosine"
FT modified_base 1..7
FT /*tag= b
FT /note= "2'-methoxyethoxy sugar moieties"
FT modified_base 15..20
FT /*tag= b
FT /note= "2'-methoxyethoxy sugar moieties"

XX WO9845314-A1.
XX 15-OCT-1998.
XX PF 07-APR-1998; 98WO-US006895.
XX PR 09-APR-1997; 97US-00838715.
XX PA (ISIS-) ISIS PHARM INC.
XX Draper KG, Kisner DL, Anderson KP, Chapman S;
XX WPI; 1998-568330/48.
DR
XX New antisense oligonucleotides that target cytomegalovirus nucleic acid - particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.

XX Claim 7; Page 32; 9pp; English.
XX This antisense oligonucleotide is targeted to a nucleic acid sequence in the IE (immediate early) 2' region of the cytomegalovirus (CMV) genome and is able to inhibit CMV replication. Optionally the oligonucleotide include at least one 2'-(2-methoxyethoxy) sugar modification or phosphorothioate internucleotide linkages. The oligonucleotides (AAX17861-X17924) are also used to inhibit CMV infections (by in vivo or in vitro contact with cells, tissues or body fluids), especially to treat or prevent CMV infections, particularly retinitis

XX Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
SQ Best Match 0.8%; Score 14.2; DB 1; Length 20;
XX Query Local Similarity 84.2%; Pred.No. 8.7e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 131 GGATGAAGAGATCAACG 149
 Db 20 GCAAGAGAAGCAACG 2

RESULT 975
 AAZ17890/c
 ID AAZ17890 standard; DNA; 20 BP.
 XX AC AAX17890;
 XX DT 11-MAY-1999 (first entry)
 XX DE Anti-CMV oligonucleotide #5476.
 XX KW Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
 KW cytomagalovirus; inhibition; replication; sugar modification;
 KW phosphorothioate; infection; retinitis; ss.
 XX OS Synthetic.
 OS Human herpesvirus 5.
 XX PN WO9845314-A1.
 XX PD 15-OCT-1998.
 XX PF 07-APR-1998; 98WO-US006895.
 XX PR 09-APR-1997; 97US-00838715.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Draper KG, Kisner DL, Anderson KP, Chapman S;
 XX DR WPI; 1998-568330/48.
 XX PT New antisense oligonucleotides that target cytomegalovirus nucleic acid -
 PT particularly including 2-methoxyethoxy sugar modifications, especially
 PT for treating viral retinitis, with long-lasting retention in the retina.
 XX PS Claim 7; Page 30; 99pp; English.
 CC Antisense oligonucleotides (AAZ17861-X17924) are targeted to a nucleic
 CC acid (AAZ17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
 CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
 CC replication. Optionally the oligonucleotides include at least one 2'-(2-
 CC methoxyethoxy) sugar modification or phosphorothioate internucleotide
 CC linkages. The oligonucleotides are used to inhibit CMV infections (by in
 CC vivo or in vitro contact with cells, tissues or body fluids), especially
 CC to treat or prevent CMV infections, particularly retinitis
 XX SQ Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 131 GGATGAAGAGATCAACG 149
 Db 20 GCAAGAGAAGCAACG 2

RESULT 976
 AAZ18075
 ID AAZ18075 standard; DNA; 20 BP.
 XX AC AAZ18075;
 XX DT 11-OCT-1999 (first entry)
 XX DE MAP 5 gene specific primer.

XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.
 XX OS Synthetic.
 OS Homo sapiens.
 XX PN WO9934016-A2.
 XX PD 08-JUL-1999.
 XX PF 28-DEC-1998; 98WO-IL000625.
 XX PR 29-DEC-1997; 97IL-00122793.
 XX PR 16-OCT-1998; 98IL-00126627.
 XX PA (GENE-) GENENA LTD.
 XX PI Vider B;
 XX DR WPI; 1999-419113/35.
 XX DR P-PSDB; AAY14610.
 XX PT Identifying and characterizing cells by comparing the pattern of gene
 XX expression in a selected gene family.
 XX PS Claim 4; Page 41; 102pp; English.
 XX The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell
 CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining in the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AAZ17803-218342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 971 TACACCGAGACTCAAGCC 989
 Db 2 TTCACAGAGCGTCAAGCC 20

RESULT 977
 AAZ18074
 ID AAZ18074 standard; DNA; 20 BP.
 XX AC AAZ18074;
 XX DT 11-OCT-1999 (first entry)
 XX DE MAP 4 gene specific primer.
 XX KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;

KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 PN WO934016-A2.
 XX
 PD 08-JUL-1999.
 XX
 XX 28-DEC-1998; 98WO-IL000625.
 XX
 XX 29-DEC-1997; 97IL-00122793.
 PR 16-OCT-1998; 98IL-00126627.
 XX
 XX (GENE-) GENENA LTD.
 PA
 XX Vidar B;
 XX
 DR MPI; 1999-419113/35.
 DR P-PSDB; AAY14609.
 XX
 PT Identifying and characterizing cells by comparing the pattern of gene
 PT expression in a selected gene family.
 PS Claim 4; Page 41; 102pp; English.
 XX
 CC The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell
 CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining in the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can also be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX
 SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 971 TACACCGAGACCTCAAGCC 989
 Db 2 TTACACGAGACGTCAGCC 20
 RESULT 978
 AAZ18077
 ID AAZ18077 standard; DNA; 20 BP.
 XX
 AC AAZ18077;
 XX
 XX 11-OCT-1999 (first entry)
 DT
 DE MAP 6 gene specific primer.
 XX
 KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.

OS Synthetic.
 OS Homo sapiens.
 PN WO934016-A2.
 XX
 PD 08-JUL-1999.
 XX
 XX 28-DEC-1998; 98WO-IL000625.
 XX
 XX 29-DEC-1997; 97IL-00122793.
 PR 16-OCT-1998; 98IL-00126627.
 XX
 XX (GENE-) GENENA LTD.
 PA
 XX Vidar B;
 XX
 DR MPI; 1999-419113/35.
 DR P-PSDB; AAY14612.
 XX
 PT Identifying and characterizing cells by comparing the pattern of gene
 PT expression in a selected gene family.
 PS Claim 4; Page 41; 102pp; English.
 XX
 CC The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell
 CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining in the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can also be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX
 SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 971 TACACCGAGACCTCAAGCC 989
 Db 2 TTACACGAGACGTCAGCC 20
 RESULT 979
 AAZ18193
 ID AAZ18193 standard; DNA; 20 BP.
 XX
 AC AAZ18193;
 XX
 XX 11-OCT-1999 (first entry)
 DT
 DE Serine threonine kinase gene specific primer 240.
 XX
 KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX


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XX PF 01-MAY-1998; 98WO-US008926.
XX PS
XX PR 02-MAY-1997; 97US-0045400P.
XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX PI Morrison CJ, Reiss E, Aidorevich L, Choi JS;
XX XQ WPI; 1999-034737/03.
XX
XX PT New nucleic acid probes for filamentous fungi - for detecting e.g.
XX PT Aspergillus, Fusarium, Mucor, Rhizomucor, Absidia,
XX PT Cunninghamella, Pseudoallescheria boydii, Penicillium and Sporothrix
XX PT species.
XX
XX PS Example 1; Page 8; 45pp; English.
XX
XX CC PCR primers AAV70875-76 and AAV83709 were used to amplify internal
XX CC transcribed spacer 2 (ITS2) and adjacent regions of various filamentous
XX CC fungi. Probes can be derived from the amplified sequence (see AAV70845-
XX CC 73) which are species-specific, and can be used for identifying a species
XX CC selected from Aspergillus flavus, A. fumigatus, A. niger, A. terreus, A.
XX CC nidulans, Fusarium solani, F. moniliforme, Mucor rouxii, M. racemosus, M.
XX CC plumbeus, M. indicus, M. circinelloides f. circinelloides, Rhizopus
XX CC oryzae, R. microsporus, R. circinans, R. stolonifer, Rhizomucor pusillus,
XX CC Absidia corymbifera, Cunninghamella elegans, Pseudallescheria boydii
XX CC (teleomorph of Scedosporium apiospermum), Penicillium notatum, or
XX CC Sporothrix schenckii. The probes can be used for differentiating
XX CC filamentous fungal species from each other and from other medically
XX CC important fungi
XX
XX XQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1549 CTGCGTCTTCGCGATGC 1567
XX DB 19 CTGCGTCTTCGCGATGC 1
XX
XX RESULT 982
XX AAX26351/c
XX ID AAX26351 standard; DNA; 20 BP.
XX
XX AC AAX26351;
XX
XX CC 27-AUG-2003 (revised)
XX DT 25-MAY-1999 (first entry)
XX
XX XQ PCR primer 2S used to amplify DNA encoding a thrombopoietin protein.
XX DE Cat; thrombopoietin; growth; growth differentiation; megakaryocyte;
XX KW PCR primer; ss.
XX
XX OS Synthetic.
XX OS Felis catus.
XX
XX PN JP11056368-A.
XX
XX XQ 02-MAR-1999.
XX
XX PF 27-AUG-1997; 97JP-00230911.
XX PR 27-AUG-1997; 97JP-00230911.
XX
XX PA (NISK ) NIPPON SEIBUTSU KAGAKU KENKYUSHO ZH.
XX
XX XQ WPI; 1999-222382/19.
XX
XX PT New gene and protein having of cat thrombopoietin activity - for

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```

PT promoting the growth and the growth differentiation of a megakaryocyte.
XX
XX PS Example 1; Page 4; 13pp; Japanese.
XX
XX CC The present sequence represents a PCR primer used to amplify nucleic acid
XX CC encoding a cat protein having thrombopoietin activity. The protein
XX CC promotes the growth and the growth differentiation of megakaryocytes.
XX CC (Updated on 27-AUG-2003 to correct OS field.)
XX
XX XQ Sequence 20 BP; 1 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1626 AGCCCCCAGCAGCGCGG 1644
XX DB 19 AGTCCACAGCAGCGCAGCAG 1
XX
XX RESULT 983
XX AAZ03102/c
XX ID AAZ03102 standard; DNA; 20 BP.
XX
XX AC AAZ03102;
XX
XX DT 07-OCT-1999 (first entry)
XX
XX XQ PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
XX KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
XX KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
XX KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;
XX KW Bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
XX
XX OS Synthetic.
XX OS Chlamydia trachomatis.
XX
XX PN WO9928475-A2.
XX
XX XQ 10-JUN-1999.
XX
XX PF 27-NOV-1998; 98WO-IB001939.
XX
XX PR 28-NOV-1997; 97FR-00015041.
XX PR 17-DEC-1997; 97FR-00016034.
XX PR 04-NOV-1998; 98US-0107077P.
XX
XX PA (GEST ) GENSET.
XX
XX PI Griffais R;
XX
XX DR WPI; 1999-371125/31.
XX
XX PT Genome sequence of Chlamydia trachomatis.
XX PS Disclosure; Page 1579; 1755pp; English.
XX
XX CC PCR primers AAZ01426-206209 were used to amplify open reading frames
XX CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
XX CC encode polypeptides (see AAV36754-Y37949) which can be used as vaccines
XX CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX CC be used to control growth of the microorganism. Chlamydia trachomatis is
XX CC responsible for a large number of diseases, e.g. eye diseases such as
XX CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
XX CC conjunctivitis; genital diseases such as nongonococcal urethritis;
XX CC epidymitis, cervicitis, salpingitis, perihhepatitis, Bartholinitis;
XX CC pneumonia in breast feeding infants; and venereal lymphogranulomatosis.
XX CC The polypeptides of the invention may be of use in treating these
XX CC diseases
XX
XX XQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

```



```

Query Match          0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 535 AGCCCATCTTTTGACAAGC 553
    ||| ||||| |||
DB 19 AGCGTCATCTTTGAGAAGC 1

RESULT 984
AAZ05087/c
ID AAZ05087 standard; DNA; 20 BP.
XX
AC AAZ05087;
XX
XX 07-OCT-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
OS Synthetic.
OS Chlamydia trachomatis.
XX
FN WO9928475-A2.
XX
PD 10-JUN-1999.
XX
PF 27-NOV-1998; 98WO-IB001939.
XX
PR 28-NOV-1997; 97FR-00015041.
PR 17-DEC-1997; 97FR-00016034.
PR 04-NOV-1998; 98US-0107077P.
XX
XX (GEST ) GENSET.
XX
PI Griffais R;
XX
XX WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
XX
PS Disclosure; Page 1742; 1755pp; English.
XX
XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames
XX (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
XX encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
XX against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX be used to control growth of the microorganism. Chlamydia trachomatis is
XX responsible for a large number of diseases, e.g. eye diseases such as
XX conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
XX conjunctivitis; genital diseases such as nongonococcal urethritis,
XX epididymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;
XX pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
XX The polypeptides of the invention may be of use in treating these
XX diseases
XX
SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match          0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1477 CGGATCCACAACTTCCTG 1495
    ||||| ||||| |||
DB 20 CGGATCCATAAACGTCATG 2

RESULT 985
AAZ03873

```

```

ID AAZ03873 standard; DNA; 20 BP.
XX
AC AAZ03873;
XX
XX 07-OCT-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
OS Synthetic.
OS Chlamydia trachomatis.
XX
FN WO9928475-A2.
XX
PD 10-JUN-1999.
XX
PF 27-NOV-1998; 98WO-IB001939.
XX
PR 28-NOV-1997; 97FR-00015041.
PR 17-DEC-1997; 97FR-00016034.
PR 04-NOV-1998; 98US-0107077P.
XX
XX (GEST ) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
XX
PS Disclosure; Page 1642; 1755pp; English.
XX
XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames
XX (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
XX encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
XX against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX be used to control growth of the microorganism. Chlamydia trachomatis is
XX responsible for a large number of diseases, e.g. eye diseases such as
XX conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
XX conjunctivitis; genital diseases such as nongonococcal urethritis,
XX epididymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;
XX pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
XX The polypeptides of the invention may be of use in treating these
XX diseases
XX
SQ Sequence 20 BP; 7 A; 8 C; 2 G; 3 T; 0 U; 0 Other;

Query Match          0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1281 GCCAGGCATCCTGTCCAAC 1299
    ||| ||||| |||
DB 1 GCCAAGCATCTCTCAAAAC 19

RESULT 986
AAZ04109
ID AAZ04109 standard; DNA; 20 BP.
XX
XX AC AAZ04109;
XX
XX 07-OCT-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;

```

KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.

XX Synthetic.
OS Chlamydia trachomatis.

PN WO928475-A2.

PD 10-JUN-1999.

XX 27-NOV-1998; 98WO-IB001939.

XX 28-NOV-1997; 97FR-00015041.

PR 17-DEC-1997; 97FR-00016034.

PR 04-NOV-1998; 98US-0107077P.

XX (GEST) GENSET.

XX Griffais R;

XX WPI; 1999-371125/31.

XX Genome sequence of Chlamydia trachomatis.

XX Disclosure; Page 1661; 1755pp; English.

CC PCR primers AAZ01426-206209 were used to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AA36754-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal urethritis, epididymitis, cervicitis, salpingitis, perihepatitis, Bartholinitis; pneumopathy in breast feeding infants; and venereal lymphogranulomatosis. The polypeptides of the invention may be of use in treating these diseases

SQ Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 863 TGAAGCAGTACTCTGGATGA 881

Db 1 TGAAGCAGTACTCTGGAGGA 19

RESULT 987

AAZ06548

ID AAZ06548 standard; DNA; 20 BP.

XX AAZ06548;

XX 23-NOV-1999 (first entry)

DE Oligonucleotide primer ITS2.

XX internal transcribed spacer; ITS; ribosomal RNA; fungal pathogen; PCR;
KW primer; detection; plant disease; crop protection; ss.

XX Synthetic.

XX WO9942609-A1.

PN 26-AUG-1999.

XX 18-FEB-1999; 99WO-BP001058.

XX 20-FEB-1998; 98US-00026601.

XX (NOVS) NOVARTIS AG.

PA (NOVS) NOVARTIS-ERFINDUNGEN VERW GES MBH.

XX Beck JJ;

XX WPI; 1999-527487/44.

XX New internal transcribed spacer DNA from fungal pathogens, used as
PT sources of primers and probes for pathogen detection.

XX Example 6; Page 18; 40pp; English.

XX This primer was used to amplify a region of the 5.8S rRNA, the Internal
CC Transcribed Spacer or ITS sequence. This region is highly conserved
CC between species. The Internal Transcribed Spacer (ITS) sequences can be
CC isolated from the ribosomal RNA gene region of fungal pathogens, such as
CC Pyrenophora tritici-repentis. The ITS can then be probed for by a
CC sequence with at least 10 contiguous nucleotides in homology with the
CC ITS. This provides a method for detecting fungal pathogens of crops, such
CC as wheat and maize, the sensitivity of this method allows differentiation
CC between members of the species or genus

XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 8.7e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567

Db 2 CTTCGGTCTTCGTCGATGC 20

RESULT 988

AAZ06549/C

ID AAZ06549 standard; DNA; 20 BP.

XX AAZ06549;

XX 23-NOV-1999 (first entry)

XX Oligonucleotide primer ITS3.

XX internal transcribed spacer; ITS; ribosomal RNA; fungal pathogen; PCR;
KW primer; detection; plant disease; crop protection; ss.

XX Synthetic.

XX WO9942609-A1.

PN 26-AUG-1999.

XX 18-FEB-1999; 99WO-BP001058.

XX 20-FEB-1998; 98US-00026601.

XX (NOVS) NOVARTIS AG.

XX (NOVS) NOVARTIS-ERFINDUNGEN VERW GES MBH.

XX Beck JJ;

XX WPI; 1999-527487/44.

XX New internal transcribed spacer DNA from fungal pathogens, used as
PT sources of primers and probes for pathogen detection.

XX Example 6; Page 18; 40pp; English.

XX This primer was used to amplify a region of the 5.8S rRNA, the Internal
CC Transcribed Spacer or ITS sequence. This region is highly conserved
CC between species. The Internal Transcribed Spacer (ITS) sequences can be
CC isolated from the ribosomal RNA gene region of fungal pathogens, such as
CC Pyrenophora tritici-repentis. The ITS can then be probed for by a
CC sequence with at least 10 contiguous nucleotides in homology with the


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XX PCR primer used to amplify an ORF of Chlamydia pneumoniae.
DE Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
OS Synthetic.
OS Chlamydophila pneumoniae.
XX
PN WO9927105-A2.
XX
PD 03-JUN-1999.
XX
XX
PF 20-NOV-1998; 98WO-IB001890.
XX
PR 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
PA (GEST ) GENSET.
XX
PI Griffais R;
XX
DR WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
XX
PS Page 1827; Disclosure; 1912pp; English.
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotide sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX
SQ Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 291 TCGTTCTGACGGGGGCCA 309
Dn 20 TCGTTCTGACGGGGGCCA 2
RESULT 992
AAX27102/c
ID AAX27102 standard; DNA; 20 BP.
XX
AC AAX27102;
XX
DT 21-MAY-1999 (first entry)
DE
XX
DE Primer for Candida Internal transcribed spacer region 2.
XX
KW Internal transcribed spacer region 2; ITS2; probe; Candida detection;
KW infection; diagnosis; probe; ss.
XX
OS Synthetic.
OS Candida sp.
XX
PN WO9906596-A1.
XX
XX 11-FEB-1999.
PD
XX
PF 30-JUL-1998; 98WO-US015840.

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XX 30-JUL-1997; 97US-00903446.
PR
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Lott TJ, Elie CM, Morrison CJ, Reiss E;
XX
DR WPI; 1999-153818/13.
XX
XX New nucleic acid probes for Candida species - comprises a sequence which
PT hybridises with a nucleic acid molecule encoding a portion of the
PT internal transcribed spacer 2 region.
XX
PS Example 1; Page 12; 59pp; English.
XX
XX This sequence is a primer for a Candida internal transcribed spacer
CC region 2 (ITS2) sequence. The invention relates to a nucleic acid probe
CC for a Candida species that selectively hybridises with a nucleic acid
CC molecule encoding a portion of the ITS2, or a complementary sequence of a
CC Candida species selected from Candida guilliermondii, C. haemulonii, C.
CC kefyr, C. lambica, C. lusitanae, C. norvegensis, C. norvegica, C.
CC rugosa, C. utilis, C. vismanathii, C. zeylanoides, C. dubliniensis, and
CC C. pelliculosa. The nucleic probes can be used to detect, identify and
CC distinguish or differentiate between Candida species in a sample or
CC specimen with high sensitivity and specificity. The probes can be used to
CC detect the presence of Candida in the sample, diagnose infection with the
CC disease, quantify the amount of Candida in the sample, or monitor the
CC progress of therapies used to treat the infection. They can also be used
CC to study the organisms and related diseases and to guide therapies and
CC treatments for the diseases
XX
SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTGGTCTTCTGTCGATGC 1567
Dn 19 CTGGCTTCTTCTGTCGATGC 1
RESULT 993
AAX22586
ID AAX22586 standard; DNA; 20 BP.
XX
AC AAX22586;
XX
DT 13-DEC-1999 (first entry)
DE
XX PCR primer #2 for amplification of ITS1.
XX
KW Internal transcribed region; ITS1; nuclear small subunit; nss; vaccine;
KW horse; equine protozoal myeloencephalitis; EPM; diagnosis;
KW therapeutic agent; prophylactic agent; parasite; cyst; PCR primer; ss.
XX
OS Synthetic.
OS Neospora caninum.
XX
PN WO9947927-A1.
XX
PD 23-SEP-1999.
XX
PF 16-MAR-1999; 99WO-US005754.
XX
PR 16-MAR-1998; 98US-00042600.
XX
PA (REGC ) UNIV CALIFORNIA.
XX
PI Marsh AE, Conrad PA, Barr BC;
XX
DR WPI; 1999-571872/48.
XX

```

PT Biologically pure culture of equine Neospora, used as source of vaccines
PT and diagnostic reagents.
XX Example 3; Page 35; 47pp; English.
XX PCR primers AAZ22585-422586 are used to amplify the internal transcribed
CC spacer region (ITS1) of the nuclear small subunit (nss) of Neospora
CC caninum isolates (CN1 and BPA1:AAZ22584). The invention relates to a
CC biologically pure culture of equine Neospora, and the PCR product is used
CC in the identification of the culture. Immunogens (optionally expressed
CC from gene therapy vectors) from equine Neospora are used in vaccines for
CC the treatment or prevention of Neospora infection in horses and other
CC animals. Neospora is a causative agent of equine protozoal
CC myeloencephalitis (EPM). Detection of Neospora-specific antigens,
CC antibodies or nucleic acid (by usual immunoassay or hybridization tests)
CC is used to diagnose infection. Antibodies specific for equine Neospora
CC are used for diagnosis; to select candidate immunogens for vaccine
CC development; to isolate proteins; to screen DNA libraries and as
CC therapeutic/prophylactic agents. Reagents specific for equine Neospora
CC allow differentiation between equine protozoal myeloencephalitis caused
CC by Neospora and Sarcocystis neurona. These pathogens require different
CC treatments and treatment of Neospora is only effective if applied before
CC the parasite has formed cysts. The vaccines also prevent shedding of
CC oocysts by animals known to be infected
XX
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTGCGTCTTCGTCGATGC 1567
DB |||||
2 CTGCGTCTTCGTCGATGC 20
RESULT 994
AAZ29421/C
ID AAZ29421 standard; DNA; 20 BP.
XX
AC AAX29421;
XX
XX 10-JUN-1999 (first entry)
XX
DE Rat JNK1-specific oligo ISIS No: 21867.
XX
XX Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1;
KW JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe; rat;
KW hyperproliferative; stress-activated protein kinase; p54; SAP; ss.
XX
XX Synthetic.
OS Rattus norvegicus.
XX
XX WO9909214-A1.
XX
XX 25-FEB-1999.
XX
XX 07-AUG-1998; 98WO-US016488.
XX
XX 13-AUG-1997; 97US-00910629.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX McKay R, Dean N, Monia BP, Nero PS, Gaarde WA;
XX
XX WPI; 1999-181060/15.
XX
XX New antisense oligonucleotides that detect and modulate the expression of
PT Jun N-terminal kinase proteins - useful for treating hyperproliferative
PT diseases and inhibiting tumor growth in animals, and for modulating
PT protein phosphorylation by these proteins.
XX
XX Example 7; Page 114; 190pp; English.
PS

XX The invention relates to antisense oligonucleotides that detect and
CC modulate the expression of Jun N-terminal kinase (JNK) proteins. The
CC oligonucleotides specifically hybridize to a nucleic acid encoding a
CC JNK1, JNK2 or JNK3 protein, and which modulate expression of these
CC proteins. The oligonucleotides are useful for modulating JNK protein
CC expression and cell cycle progression in cultured cells or animal cells.
CC The oligonucleotides are also useful for modulating the phosphorylation
CC of a protein that has been phosphorylated by a JNK protein, and the
CC expression of a cellular protein that promotes one or more metastatic
CC events. The oligonucleotides also form pharmaceutical compositions for
CC treating animals with a hyperproliferative disease, and for inhibiting
CC tumor growth in an animal. The invention also provides sequences that can
CC specifically hybridize to nucleic acids encoding rat stress activated
CC protein kinase (SAP) or p54, a homologue of human JNK protein
XX
SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1424 GGATCTCCGAGGAGTGC 1442
DB |||||
20 GGATCTCCGAGGAGTGC 20
RESULT 995
AAAI3128/C
ID AAI3128 standard; DNA; 20 BP.
XX
AC AAI3128;
XX
XX 17-JUL-2000 (first entry)
XX
DE PI3K antisense inhibitor oligonucleotide ISIS# 32141.
XX
XX Phosphatidyl inositol 3 kinase; PI3K; antisense oligonucleotide; p110;
KW catalytic subunit; treatment; rheumatoid arthritis; asthma; research;
KW diagnostic; infection; inflammation; tumour formation; inhibitor; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT misc_feature 1..20
FT /tag= a
FT /note= "Phosphorothioate internucleoside linkage"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides"
XX
XX US6046049-A.
XX
XX 04-APR-2000.
XX
XX 19-JUL-1999; 99US-00357070.
XX
XX 19-JUL-1999; 99US-00357070.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Cowser LM;
XX
XX WPI; 2000-282691/24.
XX
XX New antisense compounds targeting nucleic acids encoding human PI3 kinase
PT p110 delta useful for treating a disease or condition associated with PI3
PT kinase p110 delta expression, e.g. rheumatoid arthritis, asthma.
PT

XX Claim 16; Col 41; 35pp; English.

XX This sequence represents a phosphatidyl inositol 3 kinase (PI3K)

XX targeting antisense oligonucleotide. Phosphatidyl inositol 3 kinases act

XX as downstream effectors of hormone and growth factor receptors, and have

XX been implicated in growth factor mediated cell transformation,

XX mitogenesis, protein trafficking, cell survival and proliferation, and

XX many other cellular activities. PI3K is a heterodimer, consisting of a

XX 110KD catalytic subunit (p110), and an 85KD regulatory subunit (p85). The

XX invention relates to antisense oligonucleotides which target the p110

XX delta mRNA of PI3K. The antisense oligonucleotides specifically hybridise

XX with various regions of the PI3K mRNA sequence, and inhibit the

XX expression of PI3K. The antisense oligonucleotides may be used to treat

XX an animal, particularly human, suspected of having or being prone to a

XX disease or condition associated with the expression of PI3K, e.g.

XX rheumatoid arthritis or asthma. The treatment works through the

XX modulation (preferably inhibition) of the expression of PI3K. The

XX antisense oligonucleotides may also be used for research and diagnostics,

XX in pharmaceutical compositions and formulations, in the preparation of

XX kits for detecting the level of PI3K in a sample, and as prophylaxis,

XX e.g. to prevent or delay infection, inflammation or tumour formation.

XX Antisense oligonucleotides, which are able to inhibit gene expression

XX specifically, are used to elucidate the function of particular genes, and

XX to distinguish between functions of various members of a biological

XX pathway

XX Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 8.7e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1231 CAGCTACACTTCATCTCC 1249

Db 19 CTGCTAGACTTCAGCTTC 1

RESULT 996

AAA07709/c

ID AAA07709 standard; DNA; 20 BP.

XX AAA07709;

AC AAA07709;

XX 20-JUN-2000 (first entry)

DE Human collectin sequencing primer TGPI.

XX Collectin; human; antibacterial; antiviral; PCR primer; ss.

XX Homo sapiens.

XX WO200011161-A1.

XX 02-MAR-2000.

XX 24-AUG-1999; 99WO-JP004552.

XX 24-AUG-1998; 98JP-00237611.

XX (FUSO) FUSO PHARM IND LTD.

XX Wakamiya N;

XX WPI; 2000-224696/19.

XX New collectin of human origin having antibacterial and antiviral

XX activity, and gene encoding it useful for production of transgenic

XX animals and of antibodies for screening potential drug molecules.

XX Example 4; Page 36; 106pp; Japanese.

XX The invention relates to polynucleotides encoding a new collectin of

CC human origin. The collectin can be used as an antibacterial and antiviral

CC agent and for screening potential drug molecules. The new collectin can

CC be produced by standard recombinant methodology. Sequences AAA07708-11

CC represents PCR primers for cap site sequencing of human collectin

XX Sequence 20 BP; 3 A; 8 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 8.7e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 595 GCGTTTGGGAACCTGGAGA 613

Db 19 GCATTAGCGAAACTGAAGA 1

RESULT 997

AAZ95024/c

ID AAZ95024 standard; DNA; 20 BP.

XX AAZ95024;

AC AAZ95024;

XX 15-AUG-2000 (first entry)

DE Prostate cancer diagnostic marker Prol15 forward PCR primer.

XX Prostate cancer; cancer specific gene; CSG; expressed sequence tag; EST;

XX diagnosis; monitoring; staging; imaging; therapy; metastasis; marker;

XX human; Prol15; PCR primer; ss.

XX Homo sapiens.

XX WO2000023111-A1.

XX 27-APR-2000.

XX 19-OCT-1999; 99WO-US024331.

XX 19-OCT-1998; 98US-0104737P.

XX (DIAD-) DIADEXUS LLC.

XX Salceda S, Recipon H, Cafferkey R;

XX WPI; 2000-339531/29.

XX Diagnosing, staging and monitoring the presence and metastases of

XX prostate cancer especially useful for treating prostate cancer comprises

XX measuring changes in cancer specific gene levels.

XX Example 2; Page 27; 74pp; English.

XX The present sequence is that of the forward primer used in the real-time

XX quantitative PCR amplification of cancer specific gene Prol15 (see

XX AAZ95004 and AAZ95005). Overexpression of Prol15 was found in 3 of 4

XX primary prostate cancer samples examined, indicative of it being a

XX diagnostic marker for prostate cancer. The invention provides ESTs and

XX full-length contigs for CSGs (see AAZ94998-295017). The CSGs,

XX polypeptides encoded by them, and antibodies that specifically bind CSG

XX are used in claimed methods for detecting, diagnosing, monitoring,

XX staging, imaging and treating prostate cancer

XX Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 8.7e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1600 GACACCGAGTTCTTAAGCCA 1618

Db 19 GACCTGAGTTCAAGCCA 1

```

RESULT 998
AAZ40718/c
ID AAZ40718 standard; DNA; 20 BP.
XX
AC AAZ40718;
XX
DT 21-FEB-2000 (first entry)
XX
DE Primer for sequencing antibody CC92 heavy chain.
XX
KW VhalphatAG; anti-tumour associated sialylated glycoprotein antigen;
KW TAG-72; variable region; heavy chain; carcinoma; detect; tumour; ss;
KW mouse-human chimeric antibody; therapeutic agent; intraoperative therapy;
KW primer.
XX
OS Synthetic.
OS Mus sp.
XX
FN US5993813-A.
XX
PD 30-NOV-1999.
XX
XX
PF 24-MAR-1997; 97US-00822028.
XX
PR 19-OCT-1988; 88US-00259943.
PR 24-OCT-1988; 88US-00261942.
PR 19-OCT-1989; 89US-00424362.
PR 31-MAR-1993; 93US-00040687.
XX
PA (DOWC ) DOW CHEM CO.
XX
PI Mezes PS, Gourlie BB, Schlom J, Kaplan DA, Anderson WHK;
PI Rixon MW;
XX
DR WPI; 2000-038240/03.
XX
PT New mouse-human chimeric antibody, useful for in vivo diagnosis of
PT cancer.
XX
PS Example; Col 34; 120pp; English.
XX
CC AAZ40715-240718 are primers used to sequence the heavy chains of
CC monoclonal antibodies directed against TAG-72, designated colon cancer
CC (CC) antibodies. The CC antibodies are produced from the rearrangement of
CC VhalphatAG (AAZ40701). The antibodies are used in the invention which
CC relates to a new anti-tumour associated sialylated glycoprotein antigen
CC (TAG)-72 mouse-human chimeric antibody. The variable region of the
CC antibody has a heavy chain (VH) where VH is encoded by a DNA sequence
CC homologous to the VhalphatAG germline gene. The invention includes a
CC method for in vivo carcinoma targeting through the administration to an
CC animal of an anti-TAG-72 mouse-human chimeric antibody produced by
CC specific cell lines. The antibody or a fragment are conjugated to an
CC imaging marker or therapeutic agent, in a pharmaceutically acceptable,
CC nontoxic, sterile carrier. The chimeric antibody binds to TAG-72 which is
CC found on certain human tumour cells. The tissue regions containing the
CC tumours can be detected via the markers and/or can be treated via the
CC therapeutic agents. The method is useful for in vivo diagnosis and
CC treatment of cancer by administering to an animal an effective amount of
CC a composition for the in situ detection of carcinoma lesions. The method
CC is useful for intraoperative therapy, consisting of locating the position
CC of a tumour through the administration of the antibody, followed by
CC excising the tumour
XX
SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
    Query Match 0.8%; Score 14.2; DB 1; Length 20;
    Best Local Similarity 84.2%; Pred. No. 8.7e+02;
    Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1293 GTCCACGAGGAGTTCAAG 1311
    |||||
DB 20 GTACAATGAGAAGTTCAAG 2

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RESULT 999
AAZ72227
ID AAZ72227 standard; DNA; 20 BP.
XX
AC AAZ72227;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:6583.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
FN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST ) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
PI WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 9; Page 1634; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. the SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
    Query Match 0.8%; Score 14.2; DB 1; Length 20;
    Best Local Similarity 84.2%; Pred. No. 8.7e+02;
    Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 807 CATTATCCACGAGGAG 825
    |||||
DB 2 CTTTATCCACACAGAGGAG 20

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RESULT 1000
AAZ29697/c
ID AAZ29697 standard; DNA; 20 BP.
XX
AC AAZ29697;
XX
DT 14-AUG-2000 (first entry)

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XX DE CC92 heavy chain oligonucleotide primer SEQ ID NO:24.
XX KW Chimeric antibody; VhalphatAG; TAG-72; human; mouse; diagnosis;
XX KW tumour-associated sialylated glycoprotein antigen; cytostatic; carcinoma;
XX KW cancer; detection; therapy; primer; ds.
XX OS Homo sapiens.
XX OS Mus sp.
XX PN US6051225-A.
XX PD 18-APR-2000.
XX XX 31-MAR-1993; 93US-00040687.
XX XX 19-OCT-1988; 88US-00259943.
XX PR 24-OCT-1988; 88US-00261942.
XX PR 19-OCT-1989; 89US-00424362.
XX XX (DOWC ) DOW CHEM CO.
XX PI Anderson WHK, Kaplan DA, Schlom J, Gourlie BB, Mezes PS;
XX PI Rixon MW;
XX DR WPI; 2000-349294/30.
XX XX Novel family of chimeric antibodies for treating cancer with high
XX PT affinities to a high molecular weight tumor-associated sialylated
XX PT glycoprotein antigen of human origin.
XX PS Example; Col 34; 122pp; English.
XX CC The present invention describes an antibody (I) produced by one of the
XX CC following cell lines: CH44-1 (ATCC HB9884); CH44-2 (ATCC HB9880); CH44-4
XX CC (ATCC HB9877); CH88-1 (ATCC HB9882); CH88-2 (ATCC HB9881); CH88-3 (ATCC
XX CC HB9876); CH88-4 (ATCC HB9874); CH84-1 (ATCC HB9883); CH84-2 (ATCC HB9879)
XX CC ; CH84-3 (ATCC HB9878); and CH84-4 (ATCC HB9875), capable of binding to
XX CC tumour-associated sialylated glycoprotein (TAG)-72 with an affinity at
XX CC least 25% greater than B72.3. (I) can be used for treating and diagnosing
XX CC cancer, and for the in situ detection of carcinoma lesions and for in
XX CC vivo therapy. AAA29682 to AAA29744, and AAY90714 to AAY90723, represent
XX CC sequences used in the exemplification of the present invention
XX SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1293 GTCCACGAGGAGTTCACG 1311
DB 20 GTACAATGAGAGTTCACG 2
RESULT 1001
AAA29714/c
ID AAA29714 standard; DNA; 20 BP.
XX AC AAA29714;
XX XX 14-AUG-2000 (first entry)
XX DT VhalphatAG oligonucleotide primer SEQ ID NO:44.
XX DE Chimeric antibody; VhalphatAG; TAG-72; human; mouse; diagnosis;
XX KW tumour-associated sialylated glycoprotein antigen; cytostatic; carcinoma;
XX KW cancer; detection; therapy; primer; ds.
XX OS Homo sapiens.
XX OS Mus sp.
XX PN US6051225-A.

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XX 18-APR-2000.
XX 31-MAR-1993; 93US-00040687.
XX 19-OCT-1988; 88US-00259943.
XX 24-OCT-1988; 88US-00261942.
XX 19-OCT-1989; 89US-00424362.
XX (DOWC ) DOW CHEM CO.
XX Anderson WHK, Kaplan DA, Schlom J, Gourlie BB, Mezes PS;
XX PI Rixon MW;
XX DR WPI; 2000-349294/30.
XX XX Novel family of chimeric antibodies for treating cancer with high
XX PT affinities to a high molecular weight tumor-associated sialylated
XX PT glycoprotein antigen of human origin.
XX PS Example; Col 37; 122pp; English.
XX CC The present invention describes an antibody (I) produced by one of the
XX CC following cell lines: CH44-1 (ATCC HB9884); CH44-2 (ATCC HB9880); CH44-4
XX CC (ATCC HB9877); CH88-1 (ATCC HB9882); CH88-2 (ATCC HB9881); CH88-3 (ATCC
XX CC HB9876); CH88-4 (ATCC HB9874); CH84-1 (ATCC HB9883); CH84-2 (ATCC HB9879)
XX CC ; CH84-3 (ATCC HB9878); and CH84-4 (ATCC HB9875), capable of binding to
XX CC tumour-associated sialylated glycoprotein (TAG)-72 with an affinity at
XX CC least 25% greater than B72.3. (I) can be used for treating and diagnosing
XX CC cancer, and for the in situ detection of carcinoma lesions and for in
XX CC vivo therapy. AAA29682 to AAA29744, and AAY90714 to AAY90723, represent
XX CC sequences used in the exemplification of the present invention
XX SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1293 GTCCACGAGGAGTTCACG 1311
DB 20 GTACAATGAGAGTTCACG 2
RESULT 1002
AAA72056/c
ID AAA72056 standard; DNA; 20 BP.
XX AC AAA72056;
XX XX 24-NOV-2000 (first entry)
XX DT Japanese citrus viroid 2 gene PCR primer CB2-TM.
XX DE Japanese citrus viroid 2; JCVD2; citrus viroid-I-LSS; detection;
XX KW infection; citrus tree; Citrus medica; reverse transcription-PCR;
XX KW RT-PCR primer; ss.
XX OS citrus viroid-I-LSS.
XX XX JP2000166567-A.
XX PN 20-JUN-2000.
XX PD 09-DEC-1998; 98JP-00349472.
XX PF 09-DEC-1998; 98JP-00349472.
XX PR (NORQ ) NORINSUISANSO KAJU SHIKENBACHO.
XX PA WPI; 2000-492947/44.
XX DR Japanese citrus viroid 2 gene.
XX PT

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XX PS Example 2; Page 5; 15pp; Japanese.
XX CC
XX CC The invention relates to a gene (AAV2051) from Japanese citrus viroid 2
XX CC (JCVd2, citrus viroid-1-LS8). The invention also encompasses the cDNA
XX CC (AAV2052) of this gene, variants of the gene, primers (AAV2053-AV2054)
XX CC and probes specific for the gene, and a method for the detection of the
XX CC gene. The JCVd2 RNA was isolated from the leaves and bark of infected
XX CC Citrus medica trees. Probes of the invention may be used to detect
XX CC infection by JCVd2, and therefore may be used to provide viroid free
XX CC citrus seedlings. Sequences AAV2053-A72057 represent reverse
XX CC transcription PCR (Rr-PCR) primers for the amplification of the JCVd2
XX CC gene or its fragments. Sequences AAV2055 and AAV2056 constitute a
XX CC primer set (#2) used in an exemplification of the invention
XX SQ Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 502 CCTGAGGCTACCTGGAGA 520
Db ||||| ||||| ||||| |||||
20 CCTGAGGCTCTCGAGA 2

RESULT 1003
AAC62964/c
ID AAC62964 standard; DNA; 20 BP.
XX AC AAC62964;
XX XX
XX DT 06-FEB-2001 (first entry)
XX DE
XX KW Antisense; gene therapy; JNK2 protein; apoptosis; cancer;
XX KW cellular hyperproliferation; Alzheimer's; Parkinson's disease;
XX KW amyotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;
XX KW myocardial infarction; stroke; obstructive jaundice; polycystic kidney;
XX KW diabetes; Jun N-terminal kinase; ss.
XX OS Homo sapiens.
XX PN WO200059549-A1.
XX PD 12-OCT-2000.
XX PF 04-APR-2000; 2000WO-US008880.
XX PR 07-APR-1999; 99US-00287796.
XX PA (ISIS-) ISIS PHARM INC.
XX PI McKay R, Dean NM, Monia BP, Nero PS, Gaarde WA;
XX DR WPI; 2000-638427/61.
XX PT Novel methods for reducing apoptosis comprising contacting cells with
XX PT antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
XX PT cancer.
XX PS Example 8; Page 150; 160pp; English.
XX CC
XX CC The present invention relates to antisense oligonucleotides (AAC62844-
XX CC C63000, AAA96093-A96099 and AAA07993) that hybridise specifically to a
XX CC nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in
XX CC decrease of JNK2 expression and leading to induction of apoptosis. The
XX CC present sequence is one such antisense oligonucleotide. The
XX CC oligonucleotides of the present invention are useful for treating
XX CC diseases or conditions with reduced apoptosis, e.g. cancer and cellular
XX CC hyperproliferation. The oligonucleotides may also be used to increase the
XX CC stimulation of apoptotic proteins, e.g. for treating Alzheimer's or

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CC Parkinson's disease, amyotrophic lateral sclerosis, retinitis,
CC pigmentosa, epilepsy, myocardial infarction, stroke, obstructive
CC jaundice, polycystic kidney and diabetes. The present sequence may have a
CC phosphorothioate backbone
XX SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1424 GGATCTCCGACGAGGATGC 1442
Db ||||| ||||| ||||| |||||
20 GGATCTCCGTAGACGAGC 2

RESULT 1004
AAA94772
ID AAA94772 standard; DNA; 20 BP.
XX AC AAA94772;
XX XX
XX DT 19-JAN-2001 (first entry)
XX DE PCR primer ITS2 used for fungal detection.
XX KW PCR primer; fungal infection; pathogen spread;
XX KW internal transcribed spacer; ITS; ss.
XX OS Unidentified.
XX PN WO200052202-A2.
XX PD 08-SEP-2000.
XX PF 28-FEB-2000; 2000WO-EP001625.
XX PR 01-MAR-1999; 99US-00258967.
XX PA (NOVS ) NOVARTIS AG.
XX PA (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
XX PI Beck JJ, Perry CV;
XX DR WPI; 2000-579293/54.
XX PT Use of an oligonucleotide primer for identification of a fungal pathogen
XX PT especially Monilinia laxa or M. fructicola, comprises a nucleotide
XX PT sequence having defined base pairs.
XX PS Example 5; Page 12; 22pp; English.
XX CC
XX CC The present sequence is a PCR primer which can be used for fungal
XX CC pathogen detection especially Monilinia laxa or M. fructicola. This
XX CC sequence may be used to amplify DNA isolated from a plant leaf infected
XX CC with a pathogen via PCR. The resulting PCR product may then be detected
XX CC via standard methods. Use of the present sequence for detecting fungal
XX CC pathogens provides a detailed information on the developments and spread
XX CC of specific pathogen races over extended geographical areas and further
XX CC provides a method of detection especially suitable for diseases with a
XX CC long latent phase. The present sequence is derived from fungal internal
XX CC Transcribed spacer (ITS) sequence of the ribosomal RNA gene 5.8S
XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1549 CTTCCGGTCTTCGTCGATGC 1567
Db ||||| ||||| ||||| |||||
2 CTTCCGGTCTTCGTCGATGC 20

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RESULT 1005
AAA94773/C
ID AAA94773 standard; DNA; 20 BP.
XX
XX AAA94773;
AC
XX 19-JAN-2001 (first entry)
DT
XX PCR primer ITS3 used for fungal detection.
DE
XX PCR primer; fungal infection; pathogen spread;
KW internal transcribed spacer; ITS; ss.
XX
XX Unidentified.
OS
XX WO200052202-A2.
PN
XX 08-SEP-2000.
PD
XX 28-FEB-2000; 2000WO-EF001625.
PF
XX 01-MAR-1999; 99US-00258967.
PR
XX (NOVS ) NOVARTIS AG.
PA (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
XX
XX Beck JJ, Perry CV;
PI
XX WPI; 2000-579293/54.
DR
XX Use of an oligonucleotide primer for identification of a fungal pathogen
PT especially Monilinia laxa or M. fructicola, comprises a nucleotide
PT sequence having defined base pairs.
XX
XX Example 5; Page 12; 22pp; English.
PS
XX The present sequence is a PCR primer which can be used for fungal
CC pathogen detection especially Monilinia laxa or M. fructicola. This
CC sequence may be used to amplify DNA isolated from a plant leaf infected
CC with a pathogen via PCR. The resulting PCR product may then be detected
CC via standard methods. Use of the present sequence for detecting fungal
CC pathogens provides a detailed information on the developments and spread
CC of specific pathogen races over extended geographical areas and further
CC provides a method of detection especially suitable for diseases with a
CC long latent phase. The present sequence is derived from fungal Internal
CC Transcribed spacer (ITS) sequence of the ribosomal RNA gene 5.8S
XX
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTCCGGTCTTCGTCGATGC 1567
Db 19 CTGCGTCTTCATCGATGC 1
RESULT 1006
AAC72311
ID AAC72311 standard; DNA; 20 BP.
XX
XX AAC72311;
AC
XX 09-FEB-2001 (first entry)
DT
XX Single nucleotide polymorphism PCR primer #1427.
DE
XX Single nucleotide polymorphism; SNP; human; genetic disease;
KW disease susceptibility; cardiovascular system; endocrine system;
XX neurological system; forensic testing; paternity testing; PCR primer; ss.
XX

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OS Homo sapiens.
XX
XX WO200058519-A2.
PN
XX 05-OCT-2000.
PD
XX 30-MAR-2000; 2000WO-US008440.
PF
XX 31-MAR-1999; 99US-0127248P.
PR
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA (AFFY-) AFFYMETRIX INC.
XX
XX Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI Lipshutz RJ, Patil N, Sklar P;
PI
XX WPI; 2000-611722/58.
DR
XX Nucleic acid selected from one of 106 genes comprising single nucleotide
XX polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX
XX Claim 8; Fig 5; 214pp; English.
PS
XX The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases
XX
XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1449 ACATCCATTCTTCCTCAGT 1467
Db 2 ACATCCATACCTGCTGAGT 20
RESULT 1007
AAC72320
ID AAC72320 standard; DNA; 20 BP.
XX
XX AAC72320;
AC
XX 09-FEB-2001 (first entry)
DT
XX Single nucleotide polymorphism PCR primer #1433.
DE
XX Single nucleotide polymorphism; SNP; human; genetic disease;
KW disease susceptibility; cardiovascular system; endocrine system;
KW neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX WO200058519-A2.
PN
XX 05-OCT-2000.
PD
XX 30-MAR-2000; 2000WO-US008440.
PF
XX 31-MAR-1999; 99US-0127248P.
PR
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA (AFFY-) AFFYMETRIX INC.
XX

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Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 834 CCTGTCTTTGAGTACCTG 852
Db 19 CATGGTCTTTGAGTACATG 1

RESULT 1010
AAS03547/c
ID AAS03547 standard; DNA; 20 BP.
XX
AC AAS03547;
XX
DT 29-AUG-2001 (first entry)
XX
DE Mouse immunoglobulin heavy chain sequencing primer B72.3/CC92 HC.
XX
KW Mouse; antibody; TAG-72; mucin; chimaeric heavy chain; B72.3; tumour;
KW cancer; radioimmunoguided surgery; sequencing primer; ss; B72.3/CC92 HC.
XX
OS Mus sp.
XX
PN US6207815-B1.
XX
PD 27-MAR-2001.
XX
PF 07-JUN-1995; 95US-00479285.
XX
PR 19-OCT-1988; 88US-00259943.
PR 24-OCT-1988; 88US-00261942.
PR 19-OCT-1989; 89US-00424362.
PR 31-MAR-1993; 93US-00040687.
XX
PA (DOWC ) DOW CHEM CO.
XX
PI Mezes PS, Gourlie BB, Rixon MW, Schlom J, Kaplan DA;
PI Anderson WHK;
XX
DR WPI; 2001-298946/31.
XX
PT Novel DNA sequence encoding chimeric antibody heavy chain or its chimeric
PT antigen-binding fragment, useful for cancer treatment, such as in vivo
PT diagnostic assays, in vivo therapy and radioimmunoguided surgery.
XX
PS Example; Col.34; 120pp; English.
XX
CC The sequence is a sequencing primer for nucleic acids encoding Mouse
CC antibody heavy chains CC92VH and B72.3, which can form chimaeric antibody
CC molecules of the invention. The invention concerns chimaeric antibody
CC heavy chains or their chimaeric antigen-binding fragment which have the
CC ability to combine with anti-TAG-72 antibody light chain to form a
CC binding site having an affinity for TAG-72 which is at least 25% greater
CC than that of B72.3 (an antibody known to the prior art). TAG-72 is a
CC human tumour antigen thought to be a mucin glycoprotein. DNA sequences
CC encoding the chimaeric heavy chains are useful for producing antibodies
CC that are useful for cancer treatment, such as in vivo diagnostic assays,
CC in vivo therapy and radioimmunoguided surgery. The antibodies produce
CC significantly fewer side-effects when administered to human patients
XX
SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1293 GTCCACGAGGAGTTCAAG 1311
Db 20 GTACATGAGAGTTCAAG 2

RESULT 1011
AAH46457/c
ID AAH46457 standard; DNA; 20 BP.
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XX AAH46457;
XX
DT 14-SEP-2001 (first entry)
XX
DE Oligonucleotide #6.
XX
KW Phosphorothioate; anti-viral therapy; stereochemical pathway;
KW DNA-RNA hybrid; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT modified_base 1
FT /note= "All bases are phosphorothioate"
FT
FT /tag= a
FT /mod_base= OTHER
FT /note= "Modified with 2'-methoxyethyl"
FT 4..6
FT /tag= c
FT /label= RNA
FT 15..18
FT /tag= e
FT /label= RNA
FT modified_base 15
FT /tag= d
FT /mod_base= OTHER
FT /note= "Modified with 2'-methoxyethyl"
XX
XX US6242591-B1.
XX
XX 05-JUN-2001.
XX
XX 11-JAN-2000; 2000US-00481486.
XX
XX 15-OCT-1997; 97US-00950779.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cole DL, Ravikumar VT, Cheruvallath ZS;
XX
XX WPI; 2001-407218/43.
XX
XX Preparing sulfurized 2' substituted phosphorothioate oligonucleotides
XX useful in biological research, comprises phosphorylating the 5'-hydroxyl
XX of a nucleic acid having a nucleoside with a 2' modification.
XX
XX Example 9; Col 6; 7pp; English.
XX
XX The present invention relates to a method for preparing phosphorothioate
XX oligonucleotides having at least one nucleoside with a 2' modification.
XX The method comprises phosphorylating the 5'-hydroxyl of a nucleic acid
XX group having at least one nucleoside with a 2' modification in an
XX acetonitrile. The present sequence was used to illustrate the method of
XX the present invention. The method is useful for synthesising sulphurised
XX 2' substituted phosphorothioate oligonucleotides, which may be used in
XX molecular biological research, in applications such as anti-viral
XX therapy, and for determining the stereochemical pathways of certain
XX enzymes which recognise nucleic acids
XX
XX Sequence 20 BP; 0 A; 6 C; 4 G; 4 T; 6 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 131 GGATCAAGAGATCAACG 149
Db 20 GCAAGAGAGAGCAACG 2
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RESULT 1012
AAH44591/C
ID AAH44591 standard; DNA; 20 BP.
XX AC AAH44591;
XX DT 01-NOV-2001 (first entry)
XX DE Guar and locust bean seed differentiation PCR primer ITS3.
XX KW Guar gum; locust bean gum; detection; plant; initiator; amplification;
XX KW PCR; Cyamopsis tetragonoloba; Ceratonia siliqua; thickener;
XX KW gelling agent; food stabiliser; differentiation; PCR primer; ss.
XX OS Synthetic.
XX PN WO200166794-A1.
XX PD 13-SEP-2001.
XX PF 02-MAR-2001; 2001WO-ES0000079.
XX PR 08-MAR-2000; 2000ES-00000560.
XX PA (CNSJ ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF.
XX PA (UYIS-) UNIV LAS ISLAS BALEARES.
XX PA (UYVA-) UNIV VALENCIA.
XX PA (CARO-) CAROB SA.
XX PI Benedi Benito VJ, Domenech Sanchez A, Hernandez Viadel ML;
XX PI Alberti Serrano S, Rossello Picornell JA;
XX DR WPI; 2001-565598/63.
XX PT Differentiating between guar and locust bean seeds, or derived gums, by
XX PT amplifying specific, characteristic regions of ribosomal DNA.
XX PS Claim 1; Fig 1; 44pp; Spanish.
XX CC The present invention describes a method for differentiating between
CC seeds of Cyamopsis tetragonoloba (guar) and Ceratonia siliqua (locust
CC bean) from differences in rDNA extracted from them. The seeds are
CC germinated, DNA extracted and amplified by polymerase chain reaction
CC (PCR) using the rDNA-specific primer pairs ITS5/ITS2 (flanking the ITS
CC (intervening transcribed spacer) 1 region) and ITS3/ITS4 (flanking the
CC ITS2 region). The amplicons are then detected. Also described are: (1)
CC the detection of guar gum, individually or mixed with locust bean gum, by
CC extraction of DNA, amplification by PCR and detecting amplicons
CC corresponding to guar; and (2) extraction of DNA from guar gum and/or
CC locust bean gum. The method is used to differentiate between guar and
CC locust bean seeds (or their derived gums), e.g. to confirm authenticity
CC of guar gum. The gums are used as thickeners, gelling agents and
CC stabilisers in foods. The specified primers provide selective
CC identification of the different seeds. The present sequence represents
CC the ITS5 PCR primer from the present invention
XX SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTGCGTCTTCGTGATGC 1567
DB 19 CTTGCGTCTTCGTGATGC 1

RESULT 1013
AAH44593
ID AAH44593 standard; DNA; 20 BP.
XX AC AAH44593;

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XX 01-NOV-2001 (first entry)
XX DT Guar and locust bean seed differentiation PCR primer ITS2.
XX DE Guar gum; locust bean gum; detection; plant; initiator; amplification;
XX KW PCR; Cyamopsis tetragonoloba; Ceratonia siliqua; thickener;
XX KW gelling agent; food stabiliser; differentiation; PCR primer; ss.
XX OS Synthetic.
XX PN WO200166794-A1.
XX PD 13-SEP-2001.
XX PF 02-MAR-2001; 2001WO-ES0000079.
XX PR 08-MAR-2000; 2000ES-00000560.
XX PA (CNSJ ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF.
XX PA (UYIS-) UNIV LAS ISLAS BALEARES.
XX PA (UYVA-) UNIV VALENCIA.
XX PA (CARO-) CAROB SA.
XX PI Benedi Benito VJ, Domenech Sanchez A, Hernandez Viadel ML;
XX PI Alberti Serrano S, Rossello Picornell JA;
XX DR WPI; 2001-565598/63.
XX PT Differentiating between guar and locust bean seeds, or derived gums, by
XX PT amplifying specific, characteristic regions of ribosomal DNA.
XX PS Claim 1; Fig 1; 44pp; Spanish.
XX CC The present invention describes a method for differentiating between
CC seeds of Cyamopsis tetragonoloba (guar) and Ceratonia siliqua (locust
CC bean) from differences in rDNA extracted from them. The seeds are
CC germinated, DNA extracted and amplified by polymerase chain reaction
CC (PCR) using the rDNA-specific primer pairs ITS5/ITS2 (flanking the ITS
CC (intervening transcribed spacer) 1 region) and ITS3/ITS4 (flanking the
CC ITS2 region). The amplicons are then detected. Also described are: (1)
CC the detection of guar gum, individually or mixed with locust bean gum, by
CC extraction of DNA, amplification by PCR and detecting amplicons
CC corresponding to guar; and (2) extraction of DNA from guar gum and/or
CC locust bean gum. The method is used to differentiate between guar and
CC locust bean seeds (or their derived gums), e.g. to confirm authenticity
CC of guar gum. The gums are used as thickeners, gelling agents and
CC stabilisers in foods. The specified primers provide selective
CC identification of the different seeds. The present sequence represents
CC the ITS5 PCR primer from the present invention
XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTGCGTCTTCGTGATGC 1567
DB 2 CTTGCGTCTTCGTGATGC 20

RESULT 1014
AAS08396
ID AAS08396 standard; DNA; 20 BP.
XX AC AAS08396;
XX DT 26-SEP-2001 (first entry)
XX DE Internal transcribed spacer, ITS, PCR primer ITS2.
XX DE Internal transcribed spacer; ITS; PCR primer; 5.8s rDNA; fungal pathogen;
KW Internal transcribed spacer; ITS; PCR primer; 5.8s rDNA; fungal pathogen;

```

KW wheat disease; Sharp eyespot; fungal pathotype identification; ss; ITS2.
 XX Synthetic.
 OS
 PN WO200151653-A1.
 XX
 PD 19-JUL-2001.
 XX
 PF 09-JAN-2001; 2001WO-EP000172.
 XX
 PR 11-JAN-2000; 2000US-00481293.
 XX
 PA (SYGN) SYNGENTA PARTICIPATIONS AG.
 XX
 PI Beck JJ, Barnett CJ;
 XX
 DR WPI; 2001-442154/47.
 XX
 PT New internal transcribed spacer DNA sequences, useful for identifying
 PT fungal pathogen, particularly Rhizoctonia cerealis, and for monitoring
 PT disease development in plant population.
 XX
 PS Example 6; Page 16; 35pp; English.
 XX
 CC The sequence is a PCR primer used to amplify the internal transcribed
 CC spacer (ITS) from the 5.8s rDNA gene of wheat fungal pathogens. The ITS
 CC DNA sequences are useful for detecting Rhizoctonia cerealis, a fungal
 CC pathogen of wheat causing Sharp eyespot, for monitoring disease
 CC development in plant population, and for providing detailed information
 CC on the development and spread of specific pathogen races over extended
 CC geographical areas. The DNA sequences are specifically used as primers in
 CC PCR-based analysis for the identification of fungal pathotypes
 XX
 SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCGGTCTTCGTCGATGC 1567
 Db 2 CTTCGGTCTTCATCGATGC 20
 RESULT 1015
 AAS08397/C
 ID AAS08397 standard; DNA; 20 BP.
 XX
 AC AAS08397;
 XX
 DT 26-SRP-2001 (first entry)
 XX
 DE Internal transcribed spacer, ITS, PCR primer ITS3.
 XX
 KW Internal transcribed spacer; ITS; PCR primer; 5.8s rDNA; fungal pathogen;
 KW wheat disease; Sharp eyespot; fungal pathotype identification; ss; ITS3.
 XX
 OS Synthetic.
 XX
 PN WO200151653-A1.
 XX
 PD 19-JUL-2001.
 XX
 PF 09-JAN-2001; 2001WO-EP000172.
 XX
 PR 11-JAN-2000; 2000US-00481293.
 XX
 PA (SYGN) SYNGENTA PARTICIPATIONS AG.
 XX
 PI Beck JJ, Barnett CJ;
 XX
 DR WPI; 2001-442154/47.
 XX

PT New internal transcribed spacer DNA sequences, useful for identifying
 PT fungal pathogen, particularly Rhizoctonia cerealis, and for monitoring
 PT disease development in plant population.
 XX
 PS Example 6; Page 16; 35pp; English.
 XX
 CC The sequence is a PCR primer used to amplify the internal transcribed
 CC spacer (ITS) from the 5.8s rDNA gene of wheat fungal pathogens. The ITS
 CC DNA sequences are useful for detecting Rhizoctonia cerealis, a fungal
 CC pathogen of wheat causing Sharp eyespot, for monitoring disease
 CC development in plant population, and for providing detailed information
 CC on the development and spread of specific pathogen races over extended
 CC geographical areas. The DNA sequences are specifically used as primers in
 CC PCR-based analysis for the identification of fungal pathotypes
 XX
 SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 CTTCGGTCTTCGTCGATGC 1567
 Db 19 CTTCGGTCTTCATCGATGC 1
 RESULT 1016
 AAC91160
 ID AAC91160 standard; DNA; 20 BP.
 XX
 AC AAC91160;
 XX
 DT 20-MAR-2001 (first entry)
 XX
 DE Universal fungal internal transcribed spacer region primer #3.
 XX
 KW Fungal pathogenic; Internal Transcribed Spacer; ITS;
 KW opportunistic infection; ss.
 XX
 OS Unidentified.
 XX
 PN WO200073499-A2.
 XX
 PD 07-DEC-2000.
 XX
 PF 24-MAY-2000; 2000WO-EP004714.
 XX
 PR 28-MAY-1999; 99EP-00870109.
 PR 11-JUN-1999; 99US-0138621P.
 XX
 PA (INNO-) INNOGENETICS NV.
 PA (IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.
 XX
 PI Smith T, Maher M, Martin C, Jannes G, Rossau R, Van Der Weide M;
 XX
 DR WPI; 2001-061555/07.
 XX
 PT Detecting and identifying fungal pathogens, especially Candida,
 PT Cryptococcus and Aspergillus, comprises hybridizing the amplified nucleic
 PT acid of the fungal pathogen with a probe from the internal transcribed
 PT spacer region of a DNA.
 XX
 PS Claim 3; Page 49; 59pp; English.
 XX
 CC The present invention relates to detecting and identifying fungal
 CC pathogenic species in a sample. The method involves hybridizing a nucleic
 CC acid of a fungal pathogen possibly present in the sample with at least
 CC one oligonucleotide probe, from an Internal Transcribed Spacer (ITS)
 CC region. The method is useful for simultaneous detection and
 CC differentiation of clinically important fungi in a single assay,
 CC particularly Candida albicans, C. parapsilosis, C. tropicalis, C. kefyr,
 CC C. krusei, C. glabrata, C. dubliniensis, Aspergillus flavus, A.
 CC versicole, A. nidulans, A. fumigatus, C. neoformans and pneumocystis

CC carinii. The method is especially useful in the detection of
 CC opportunistic infections in patients with impaired immunity systems, such
 CC as organ transplant patients, patients receiving intensive anticancer
 CC treatments, diabetics or AIDS patients

SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
 |||||
 DB 2 CTGCGTCTTCATCGATGC 20

RESULT 1017
 AAC91162/c
 ID AAC91162 standard; DNA; 20 BP.

XX AAC91162;

XX 20-MAR-2001 (first entry)

DE Universal fungal internal transcribed spacer region primer #5.

XX Fungal pathogenic; Internal Transcribed Spacer; ITS;

KW opportunistic infection; ss.

OS Unidentified.

XX WO200073499-A2.

XX 07-DEC-2000.

XX 24-MAY-2000; 2000WO-EP004714.

PR 28-MAY-1999; 99EP-00870109.

PR 11-JUN-1999; 99US-0138621P.

XX (INNO-) INNOGENETICS NV.

PA (IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.

PI Smith T, Maher M, Martin C, Jannes G, Rossau R, Van Der Weide M;

XX WPI; 2001-061555/07.
 Detecting and identifying fungal pathogens, especially Candida,
 PT Cryptococcus and Aspergillus, comprises hybridizing a nucleic
 PT acid of the fungal pathogen with a probe from the internal transcribed
 PT spacer region of a DNA.

XX Claim 3; Page 49; 59pp; English.

XX The present invention relates to detecting and identifying fungal
 CC pathogenic species in a sample. The method involves hybridizing a nucleic
 CC acid of a fungal pathogen possibly present in the sample with at least
 CC one oligonucleotide probe, from an internal Transcribed Spacer (ITS)
 CC region. The method is useful for simultaneous detection and
 CC differentiation of clinically important fungi in a single assay,
 CC particularly Candida albicans, C. parapsilosis, C. tropicalis, C. kefyr,
 CC C. krusei, C. glabrata, C. dubliniensis, Aspergillus flavus, A.
 CC versicolar, A. nidulans, A. fumigatus, C. neoformans and pneumocystis
 CC carinii. The method is especially useful in the detection of
 CC opportunistic infections in patients with impaired immunity systems, such
 CC as organ transplant patients, patients receiving intensive anticancer
 CC treatments, diabetics or AIDS patients

SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567
 |||||
 DB 19 CTGCGTCTTCATCGATGC 1

RESULT 1018
 AAH46289/c
 ID AAH46289 standard; DNA; 20 BP.

XX AAH46289;

XX 25-SEP-2001 (first entry)

DE Human interferon regulatory factor-1 (IRF-1) forward RFLP PCR primer.

XX Human; interferon regulatory factor-1; IRF-1; promoter; upstream region;
 KW genotyping; polymorphism; hepatitis C virus; HCV infection;
 KW interferon therapy efficacy; IFN; RFLP analysis;
 KW restriction fragment length polymorphism; PCR primer; ss.

XX Homo sapiens.

XX JP2001136973-A.

XX 22-MAY-2001.

XX 16-NOV-1999; 99JP-00324975.

XX 16-NOV-1999; 99JP-00324975.

XX (SAKA) OTSUKA PHARM CO LTD.

XX WPI; 2001-460211/50.

XX Detection of abnormal human interferon regulatory factor-1 (IRF-1) gene.

XX Example 2; Page 6; 8pp; Japanese.

XX The invention relates to a method for the detection of an abnormal allele
 CC of the human interferon regulatory factor-1 (IRF-1) gene. The abnormal
 CC allele (AAH46293) is present in PLC/PRF/5 liver cancer cells and contains
 CC a G to A substitution at position 196 of the IRF-1 promoter region
 CC (normal alleles given in AAH46293 and AAH46294). The abnormal allele
 CC confers an insensitivity to the effects of interferon (IFN). In the
 CC method of the invention, the presence or absence of adenine at position
 CC 196 of the IRF-1 promoter is detected using procedures such as
 CC restriction fragment length polymorphism (RFLP) analysis. Prior to
 CC analysis, an IRF-1 gene fragment containing the polymorphic site can
 CC optionally be prepared (e.g., by PCR). The invention also discloses the
 CC use of IRF-1 gene fragments as probes to detect the A polymorphism. The
 CC method of the invention is used to genotype a patient with hepatitis C
 CC virus (HCV) infection in order to predict whether interferon therapy will
 CC be effective. Sequences AAH46289-AAH46290 represent PCR primers used in
 CC an exemplification of the invention to amplify wild-type and polymorphic
 CC IRF-1 promoter region fragments containing the position 196 polymorphic
 CC site for RFLP analysis

SQ Sequence 20 BP; 4 A; 4 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1188 GGCCACAGCCGTCCTC 1206
 |||||
 DB 20 GGCCACAGCCTGCTCTC 2

RESULT 1019
 AAF86755/c
 ID AAF86755 standard; DNA; 20 BP.

XX

AC AAF86755;
 XX
 DT 25-JUL-2001 (first entry)
 XX
 DE Human cytohesin-2 antisense oligonucleotide, SEQ ID NO:68.
 XX
 KW Human cytohesin-2; PSCD2; ARNO for ARF nucleotide binding site opener;
 KW mSec7; ARF exchange factor; cytosolic adapter protein;
 KW guanine nucleotide exchange factor; ADP ribosylation factor; ARF1; ARF3;
 KW ARF6; actin cytoskeleton regulation; expression inhibition;
 KW atherosclerosis; allograft rejection; hyperproliferative disorder;
 KW cancer; tumour; phosphorothioate; antisense oligonucleotide; ss.
 XX
 OS Homo sapiens.
 XX
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate linkages"
 FT modified_base 1..5
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
 FT cytosines are 5-methylcytosine"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
 FT cytosines are 5-methylcytosine"
 XX
 XX WO200130361-A1.
 XX
 XX 03-MAY-2001.
 XX
 XX 20-OCT-2000; 2000WO-US029088.
 XX
 XX 27-OCT-1999; 99US-00428583.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Bennett CF, Cowsett LM;
 XX
 XX WPI; 2001-335680/35.
 XX
 XX New antisense compounds modulating expression of human cytohesin-2 useful
 XX for diagnosis, prophylaxis and treatment of diseases associated with
 XX expression of cytohesin-2, e.g. cancer, atherosclerosis, allograft
 XX rejection.
 XX
 XX Claim 3; Page 80; 104pp; English.
 XX
 XX The invention relates to antisense oligonucleotides targetted to the
 XX human cytohesin-2 gene, which inhibit its expression. A series of
 XX oligonucleotides (AAF86697-AAF86776) were designed to target different
 XX regions of the human cytohesin-2 RNA, and were analysed for their effect
 XX on cytohesin-2 mRNA levels by quantitative real-time PCR. Cytohesin-2 is
 XX a member of a small family of cytosolic adapter proteins which function
 XX as guanine nucleotide exchange factors for ADP ribosylation factors
 XX (ARFs), small monomeric G-proteins which regulate critical vesicular
 XX traffic pathways. Cytohesin-2 (also known as PSCD2, ARNO for ARF
 XX nucleotide binding site opener, mSec7, and ARF exchange factor) is
 XX localised to the plasma membrane and promotes guanine nucleotide exchange
 XX on ARF1, ARF3 and ARF6, the latter of which regulates the assembly of the
 XX actin cytoskeleton. Through its interaction with ARF6, and in conjunction
 XX with protein kinase C, cytohesin-2 functions as a critical link between
 XX cell surface receptors and the actin cytoskeleton. The oligonucleotides
 XX of the invention are useful for diagnosis, prevention and treatment of
 XX conditions associated with cytohesin-2 expression, such as
 XX atherosclerosis, allograft rejection and hyperproliferative disorders,
 XX especially cancer
 XX
 XX Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 993 GAACCTGCTCATCAACGAG 1011
 Db 19 GAACGGGGCATCAACGAG 1
 ||||| |||||
 ||||| |||||
 RESULT 1020
 AAI69777/c
 ID AAI69777 standard; DNA; 20 BP.
 XX
 AC AAI69777;
 XX
 DT 13-DEC-2001 (first entry)
 XX
 DE 16S/23S rRNA spacer region PCR primer #3.
 KW Bacterium detection; 16S/23S rRNA spacer region; PCR primer; ss.
 XX
 OS Pseudomonas putida.
 XX
 FN JP2001190279-A.
 XX
 PD 17-JUL-2001.
 XX
 PF 13-JAN-2000; 2000JP-00004160.
 XX
 PR 13-JAN-2000; 2000JP-00004160.
 XX
 PA (MITO) MITSUBISHI JUKOGYO KK.
 XX
 DR WPI; 2001-605311/69.
 XX
 FT Detection method of Pseudomonas bacteria.
 XX
 PS Claim 9; Page 8; 11pp; Japanese.
 XX
 CC The present invention relates to a method for the detection of the
 CC 16S/23S rRNA spacer region of Pseudomonas putida (see AAI69774). The
 CC method can be used to detect Pseudomonas bacteria. The present sequence
 CC is a PCR primer which was used in an example from the present invention
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 48 ACCAGCAGTGTGACTGCTG 66
 Db 20 ACCAGCAGTGAACCTGGTG 2
 ||||| |||||
 ||||| |||||
 RESULT 1021
 AAH73769
 ID AAH73769 standard; DNA; 20 BP.
 XX
 AC AAH73769;
 XX
 DT 06-AUG-2003 (revised)
 DT 08-OCT-2001 (first entry)
 XX
 DE Guignardia rRNA gene ITS2 reverse PCR primer, SEQ ID NO:6.
 KW Ribosomal RNA gene; rRNA gene; internal transcribed spacer; ITS;
 KW pathogenic; non-pathogenic; citrus blackspot disease; citrus fruit;
 KW differentiation; characterisation; detection; PCR primer; ss.
 XX
 OS Guignardia citricarpa.
 OS Guignardia citricarpa.


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XX EN WO200153318-A2.
XX PD 26-JUL-2001.
XX PF 19-JAN-2001; 2001WO-US001735.
XX PP 19-JAN-2001; 2001WO-US001735.
XX PR 19-JAN-2000; 2000US-0177013P.
XX PA (UYOR-) UNIV OREGON.
XX PI Carroll GC;
XX PI MPI; 2001-465362/50.
XX DR
XX DR
XX PT New differentiating oligonucleotides which hybridizes with a target DNA
XX PT sequence associated with pathogenic or non-pathogenic species of
XX PT Guignardia, for differentiating pathogenic from non-pathogenic species.
XX PS Claim 5; Page 18; 33pp; English.
XX CC The invention relates to oligonucleotide amplification primers and
XX CC methods for the detection of pathogenic Guignardia citricarpa. Guignardia
XX CC citricarpa is a fungus which causes citrus blackspot disease, producing
XX CC progressive black surface lesions on the fruits of most commercial citrus
XX CC cultivars such as oranges, lemons, limes, and grapefruit. Although this
XX CC is a cosmetic disease, it causes significant losses to the citrus fruit
XX CC growing industry, as many countries do not permit the importation of
XX CC affected fruit. However, there is a second, non-pathogenic Guignardia
XX CC species, Guignardia citricarpa, which also infects citrus fruit, but
XX CC which forms insignificant lesions. This non-pathogenic Guignardia species
XX CC is morphologically almost indistinguishable from the pathogenic
XX CC Guignardia citricarpa, and both species may be simultaneously present on
XX CC one fruit. The primers of the invention are targetted to the internal
XX CC transcribed spacer (ITS) regions of the ribosomal RNA gene of either the
XX CC pathogenic Guignardia citricarpa (see AAH73767) or the non-pathogenic
XX CC Guignardia citricarpa (see AAH73768). These regions exhibit significant
XX CC differences between the two species, and provides a means by which the
XX CC two species may be distinguished from one other. The present sequence
XX CC represents a reverse PCR primer which can be used to amplify the rRNA
XX CC gene ITS regions of both the pathogenic Guignardia citricarpa and the non
XX CC pathogenic Guignardia citricarpa. (Updated on 06-AUG-2003 to correct OS
XX CC field.)
XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1549 CTTCCGCTCTTCGTCGATGC 1567
XX Db 2 CTTCCGCTCTTCATCGATGC 20
XX
XX RESULT 1022
XX AAH73770/c
XX ID AAH73770 standard; DNA; 20 BP.
XX AC AAH73770;
XX DT
XX DT 06-AUG-2003 (revised)
XX DT 08-OCT-2001 (first entry)
XX DE Guignardia citricarpa rRNA gene ITS3 forward PCR primer, SEQ ID:7.
XX KW Ribosomal RNA gene; rRNA gene; internal transcribed spacer; ITS;
XX KW non-pathogenic; citrus blackspot disease; citrus fruit; differentiation;
XX KW characterisation; detection; PCR primer; ss.
XX OS Guignardia citricarpa.
XX PN WO200153318-A2.
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XX PD 26-JUL-2001.
XX XX 19-JAN-2001; 2001WO-US001735.
XX XX 19-JAN-2000; 2000US-0177013P.
XX PA (UYOR-) UNIV OREGON.
XX PI Carroll GC;
XX PI MPI; 2001-465362/50.
XX DR
XX DR
XX PT New differentiating oligonucleotides which hybridizes with a target DNA
XX PT sequence associated with pathogenic or non-pathogenic species of
XX PT Guignardia, for differentiating pathogenic from non-pathogenic species.
XX PS Example I; Page 19; 33pp; English.
XX CC The invention relates to oligonucleotide amplification primers and
XX CC methods for the detection of pathogenic Guignardia citricarpa. Guignardia
XX CC citricarpa is a fungus which causes citrus blackspot disease, producing
XX CC progressive black surface lesions on the fruits of most commercial citrus
XX CC cultivars such as oranges, lemons, limes, and grapefruit. Although this
XX CC is a cosmetic disease, it causes significant losses to the citrus fruit
XX CC growing industry, as many countries do not permit the importation of
XX CC affected fruit. However, there is a second, non-pathogenic Guignardia
XX CC species, Guignardia citricarpa, which also infects citrus fruit, but
XX CC which forms insignificant lesions. This non-pathogenic Guignardia species
XX CC is morphologically almost indistinguishable from the pathogenic
XX CC Guignardia citricarpa, and both species may be simultaneously present on
XX CC one fruit. The primers of the invention are targetted to the internal
XX CC transcribed spacer (ITS) regions of the ribosomal RNA gene of either the
XX CC pathogenic Guignardia citricarpa (see AAH73767) or the non-pathogenic
XX CC Guignardia citricarpa (see AAH73768). These regions exhibit significant
XX CC differences between the two species, and provides a means by which the
XX CC two species may be distinguished from one other. The present sequence
XX CC represents a forward PCR primer specific for the rRNA gene ITS region of
XX CC the non-pathogenic Guignardia citricarpa. (Updated on 06-AUG-2003 to
XX CC correct OS field.)
XX SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1549 CTTCCGCTCTTCGTCGATGC 1567
XX Db 19 CTTCCGCTCTTCATCGATGC 1
XX
XX RESULT 1023
XX ABN85668/c
XX ID ABN85668 standard; DNA; 20 BP.
XX AC ABN85668;
XX DT
XX DT 13-SEP-2002 (first entry)
XX DE Phytophthora infestans ITS PCR primer ITS3.
XX KW Phytophthora infestans; potato; tomato; infection; ITS;
XX KW internal transcribed spacer; PCR; primer; ss.
XX OS Synthetic.
XX XX KR2002000043-A.
XX PN 04-JAN-2002.
XX PD
XX PF 20-JUN-2000; 2000KR-00033967.
XX XX
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PR 20-JUN-2000; 2000KR-00033967.
XX
PA (UYKA-) UNIV KANGWON.
XX
PI Kim GS, Lee YS;
XX
XX WPI; 2002-441747/47.
XX
XX DNA marker for detecting Phytophthora infestans in potato and tomato.
XX
XX Disclosure; Fig 1; 9pp; Korean.
XX
XX The invention relates to a DNA marker for detecting Phytophthora
XX infestans in potato and tomato, useful for specifically detecting a small
XX amount of Phytophthora infestans DNA and diagnosing the infection of
XX Phytophthora infestans in potato and tomato at any time. The DNA marker
XX for Phytophthora infestans in potato and tomato is produced by extracting
XX genomic DNA of Phytophthora species, amplifying the internal transcribed
XX spacer (ITS) II region using primers ITS3 (ABN85668) and ITS4 (ABN85669),
XX cloning the amplified products into pGEM-T easy vector, preparing a
XX primer PISP-1 (ABN85670) and linking the primers PISP-1 and ITS3
XX
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 1549 CTTGGGTCTTCGTCGATGC 1567
XX ||||| ||||| ||||| |||||
Db 19 CTGGGTCTTCATCGATGC 1
XX
RESULT 1024
ABN74847
ID ABN74847 standard; DNA; 20 BP.
XX
AC ABN74847;
XX
XX 26-JUL-2002 (first entry)
XX
DE Human caspase 2 antisense inhibitor oligonucleotide #26.
XX
KW Caspase 2; antisense; cytostatic; osteopathic; cerebroprotective;
KW neuroprotective; antilipemic; antiinflammatory; antimicrobial;
KW haematopoietic disorder; bone metabolism disorder; cholesterol disorder;
KW hyperproliferative disorder; cancer; blood disorder; stroke;
KW brain injury; neurodegenerative disease; infection; inflammation; tumour;
KW ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= m5c, OTHER
XX /note= "Nucleotides 1-5 and 16-20 are five-nucleotide
XX wings consisting 2'methoxyethyl (2'-MOE) nucleotides, 6-
XX 15 are 2'deoxy nucleotides, backbone linkages are
XX phosphodiester, all cytosines are 5-methylcytidines"
XX
PN WO200224720-A1.
XX
XX 28-MAR-2002.
XX
PD
XX
PF 14-SEP-2001; 2001WO-US028631.
XX
XX 20-SEP-2000; 2000US-00667018.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Zhang H, Watt AT;
XX
XX Novel antisense compound that hybridizes and inhibits nucleic acid

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DR WPI; 2002-351998/38.
XX
XX New antisense compounds targeted to nucleic acid molecule encoding
XX caspase 2, useful for treating diseases or conditions associated with
XX caspase 2, e.g. cancer, blood disorders, stroke, brain injury and
XX neurodegenerative diseases.
XX
XX Claim 3; Page 99; 146pp; English.
XX
XX The invention relates to a compound 8-50 nucleobases in length targeted
XX to a nucleic acid molecule encoding caspase 2, which specifically
XX hybridises with and inhibits the expression of caspase 2, or specifically
XX nucleic acid molecule encoding caspase 2. The activity of antisense
XX oligonucleotides of the invention may be described as, cytostatic,
XX osteopathic, cerebroprotective, neuroprotective, antilipemic,
XX antiinflammatory and antimicrobial. The antisense compounds are useful
XX for treating an animal having a disease or condition associated with
XX caspase 2, such as haematopoietic disorder, bone metabolism disorder,
XX cholesterol disorder, or a hyperproliferative disorder. These compounds
XX may further be used as research reagents and diagnostics, to distinguish
XX between functions of various members of a biological pathway, in the
XX treatment of a disease or disorder which can be treated by modulating the
XX expression of caspase 2, including cancer, blood disorders, stroke, brain
XX injury and neurodegenerative diseases. They may also be used for
XX prophylaxis, e.g. to prevent or delay infection, inflammation or tumour
XX formation. Records ABN74810-ABN74952 represent caspase 2 mRNA inhibitor
XX oligonucleotides
XX
XX Sequence 20 BP; 5 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 235 GGTGGTGGCGGACAGTGACC 253
XX ||||| ||||| ||||| |||||
Db 2 GGCGGTGGCAGCAGTGAAC 20
XX
RESULT 1025
ABK99760
ID ABK99760 standard; DNA; 20 BP.
XX
XX ABK99760;
XX
XX 21-OCT-2002 (first entry)
XX
XX Mouse RAID antisense oligonucleotide #14.
XX
XX Antisense gene therapy; RAID; death domain; caspase recruitment domain;
XX CARD; hyperproliferative disorder; cancer; growth disorder; mouse;
XX metabolic disorder; infection; inflammation; tumour formation;
XX RIP associated ICH-1/CED-3-homologous protein with death domain;
XX receptor interacting protein; antisense oligonucleotide; ss.
XX
XX Mus musculus.
XX
XX WO200248314-A2.
XX
XX 20-JUN-2002.
XX
XX 29-OCT-2001; 2001WO-US050914.
XX
XX 01-NOV-2000; 2000US-00705267.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Zhang H, Freier SM, Watt AT;
XX
XX WPI; 2002-583496/62.
XX
XX Novel antisense compound that hybridizes and inhibits nucleic acid

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